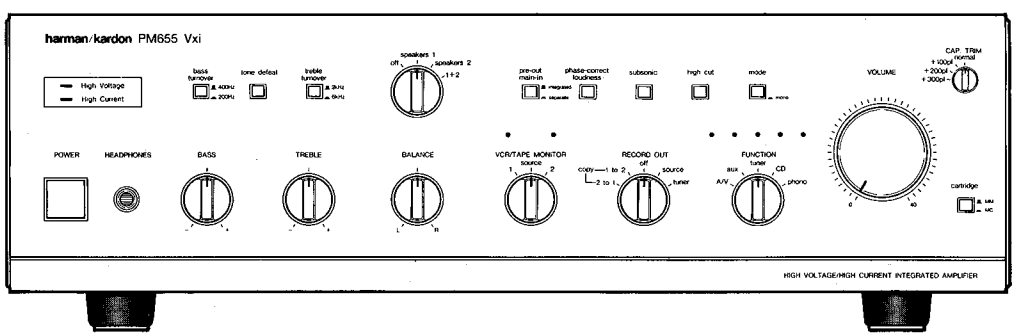
The Harman Kardon
Model PM655 Vxi

Manual 116A

ULTRAWIDEBAND INTEGRATED AMPLIFIER

Technical Manual



The following marks found in the parts list of this manual identify the models as follows.

- (UA) : North America area model
- (BK) : North America area model Black version
- (G) : General model
- (GB) : General model Black version
- (N) : Japan model

harman/kardon
240 Crossways Park West, Woodbury, N.Y. 11797
1112-3152116A0 P-088710 1500 Printed in Japan

PM655 Vxi

SPECIFICATIONS

	Nominal	Limit
RMS Output Power		
8Ω, 1kHz THD 0.08%	107W	≧90W
4Ω, 1kHz THD 0.1%	116W	≧90W
High Instantaneous Current Capability (HCC)	47A	≧40A
Half Power Bandwith	10Hz ~ 100kHz	
Frequency Responce at −3dB	0.15Hz ~ 180kHz	
Input Sensitivity		
Video/CD, Tuner	135mV	±25mV
Phono (MM)	2.2mV	±0.3mV*
Phono (MC)	120μV	±20μV*
Signal to Noise Ratio		
Video/CD, Tuner	78dB	≧75dB
Phono (MM)	78dB	≧73dB
Phono (MC)	77.5dB	≧74dB
Channel Separation at 10kHz		
Video/CD	59dB	≧45dB
Phono (MM), Tuner	59dB	≧45dB
Phono (MC)	63dB	≧44dB
IM Distrotion Ratio	0.07%	≦0.13%
Damping Factor at 1kHz	71	≧50
Tone Control Characteristics		
Bass Turnover Frquency(200Hz/400Hz)		
Bass at 50Hz/100Hz		
Boost	10dB	±2dB
Cut	10dB	±2dB
Treble Turnover Frquency (2kHz/6kHz)		
Treble at 10kHz/30kHz		
Boost	10dB	±2dB
Cut	10dB	±2dB

	Nominal	Limit
Filters		
Subsonic	15Hz, −3dB	±1dB/Octave
High Cut	6kHz, −3dB	±1dB/Octave
DC Output Voltage		
L channel	0mV	±60mV
R channel	0mV	±60mV
RIAA Equalization at Tape Out (20Hz/20kHz) (No load)	0.2dB ±0.5dB/−0.1dB	±0.5dB
Phono Over Load (No load)		
Phono (MM)	220mV	≧190mV
Phono (MC)	12.2mV	≧8mV
Dimensions (W × H × D)	17-1/2″ × 5-5/16″ × 15-11/16″ (443 × 134 × 398mm)	
Weight	22lbs. 11oz. (10.3kg)	
Power Supplies		
North America area model	AC 120V, 60Hz	
General model	AC 220/240V, 50/60Hz	
Japan model	AC 100V, 50/60Hz	
Power Consumption		
North America area model	340W (340VA)	
General model	230W	
Japan model	340W	

* Input Sensitivity for General model are 2.2mV ±0.3mV (MM) and 140μV ±20μV (MC).

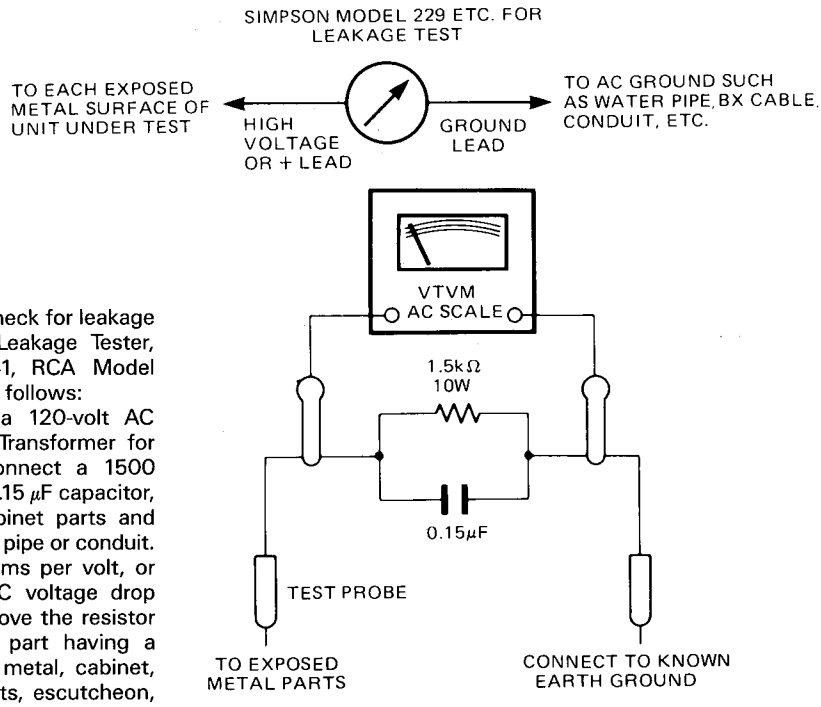
This specification is the target of servicing. But, there is a care that the specification is not applicable to the measurement condition and instrument.

Specifications and components subject to change without notice. Overall performance will be maintained or improved.

LEAKAGE TEST (FOR SERVICE ENGINEERS IN THE U.S.A.)

Before returning the unit to the user, perform the following safety checks:

1. Inspect all lead dress to make certain that leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the unit.
2. Be sure that any protective devices such as nonmetallic control knobs, insulating fishpapers, cabinet backs, adjustment and compartment covers or shields, isolation resistor-capacity networks, mechanical insulators, etc. which were removed for servicing are properly reinstalled.
3. Be sure that no shock hazard exists; check for leakage current using Simpson Model 229 Leakage Tester, standard equipment item No. 21641, RCA Model WT540A or use alternate method as follows:
   Plug the power cord directly into a 120-volt AC receptacle (do not use an Isolation Transformer for this test). Using two clip leads, connect a 1500 Ohm, 10-watt resistor paralleled by a 0.15 μF capacitor, in series with all exposed metal cabinet parts and a known earth ground, such as a water pipe or conduit. Use a VTVM or VOM with 1000 Ohms per volt, or higher sensitivity to measure the AC voltage drop across the resistor. (See Diagram.) Move the resistor connection to each exposed metal part having a return path to the chassis (antenna, metal, cabinet, screw heads, knobs and control shafts, escutcheon, etc.) and measure the AC voltage drop across the resistor. (This test should be performed with the power switch in both the On and Off positions.)
   A reading of 0.35 volt RMS or more is excessive and indicates a potential shock hazard which must be corrected before returning the unit to the owner.



DISASSEMBLY PROCEDURES (REFER TO PAGES 5 AND 19)

[1] CABINET TOP (131) REMOVAL
Remove 8 screws (A) and then remove the Cabinet Top (131).

[2] FRONT PANEL ASS'Y (AA) REMOVAL
1. Remove the Cabinet Top (131), referring to the previous step [1].
2. Remove 5 screws (B) and then remove the Front Panel Ass'y (AA).

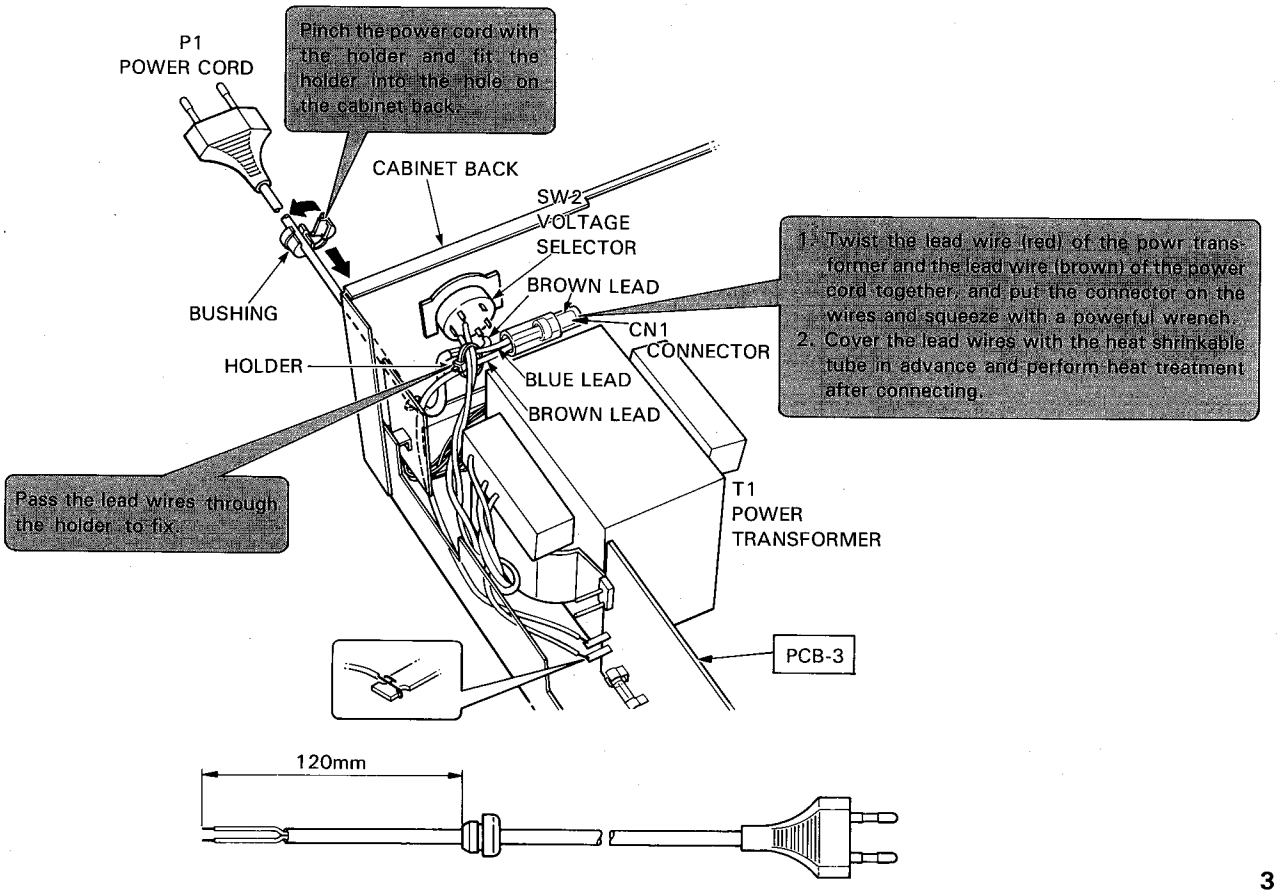
[3] MAIN P. C. BOARD (PCB-1) REMOVAL
1. Remove 10 screws (C) and then remove the Cabinet Bottom Ass'y (AC).
2. Remove the Front Panel Ass'y (AA), referring to the previous step [2].
3. Loosen 2 hexagon-socket-head screws (D) and pull out the Shaft Ass'y (BC) with the Rotary Knob Ass'y (AD).
4. Remove 24 screws (E) and a plastic rivet (F) and then remove the Cabinet Back Ass'y (AB).
   If necessary, unsolder the lead wires from the Power Transformer (T1).
5. Remove 7 screws (G) and then remove the Main P. C. Board (PCB-1) with the Heat Sink (177). At this time, unsolder the lead wires connected to the Main P. C. Board (PCB-1).

[4] FUSE P. C. BOARD (PCB-3) REMOVAL
1. Remove the Front Panel Ass'y (AA), referring to the previous step [2].
2. Pull out the Push Button Ass'y (AE) and Levers (213).
3. Remove 3 screws (H), then remove the Fuse P. C. Board (PCB-3). If necessary unsolder the lead wires.

[5] TONE 1 P. C. BOARD (PCB-5) REMOVAL
1. Remove the Front Panel Ass'y (AA), referring to the previous step [2].
2. Pull out the Shaft Ass'y (BC) with the Rotary Knob Ass'y (AD), refrring to the Previous step [3].
3. Pull out the 4 Rotary Knob Ass'y (AD), 3 Rotary Knobs (153) Cap. Trim Knob (151), Power Push Button (146) and Levers (213).
4. Remove a hexagon nut (I), then remove the Capacitance Trim P. C. Board (PCB-8).
5. Remove screw (J), 2 plastic rivet (F) and (K), 2 screw (L) and screw (E) mounting the Metal Fitting (165), then remove the Metal Fitting (165) with the Equalizer P. C. Board (PCB-11).
6. Straighten the catches fixing the 4/8Ω LED P. C. Board (PCB-9) and then remove it.
7. Remove the metal fixture (M) fixing the Headphone P. C. Board (PCB-11) and then remove it.
8. Remove 7 hexagon nuts (N) and remove 4 screws (O).
9. Remove 6 screws (P) and the Chassis Ass'y (BA), then the Tone 1 P. C. Board (PCB-5), Tone 2 P. C. Board (PCB-6) and Volume P. C. Board (PCB-7) can be removed. Unsolder the lead wires if necessary when removing each P. C. Board.

POWER CORD REPLACEMENT (FOR SERVICE ENGINEERS OTHER THAN NOTRH AMERICA)

In order to prevent fire or shock hazard when replacing the power cord, follow the procedure below to replace the parts with the standard supply parts.


P1
POWER CORD
Pinch the power cord with the holder and fit the holder into the hole on the cabinet back.
CABINET BACK
SW2
VOLTAGE SELECTOR
BROWN LEAD
BUSHING
CN1
CONNECTOR
HOLDER
BLUE LEAD
BROWN LEAD
1. Twist the lead wire (red) of the powr transformer and the lead wire (brown) of the power cord together, and put the connector on the wires and squeeze with a powerful wrench.
2. Cover the lead wires with the heat shrinkable tube in advance and perform heat treatment after connecting.
Pass the lead wires through the holder to fix.
T1
POWER
TRANSFORMER
PCB-3
120mm

ALIGNMENT PROCEDURES (REFER TO PAGES 7, 8, 9 AND 18)

■ Conditions:
- Set the Function selector to the "aux" position.
- Set the Volume control to minimum.
- Set the Speaker selector to the "off" position.
- Make the adjustment at a room temperature of 77°F (25°C).

■ DC BALANCE ADJUSTMENT

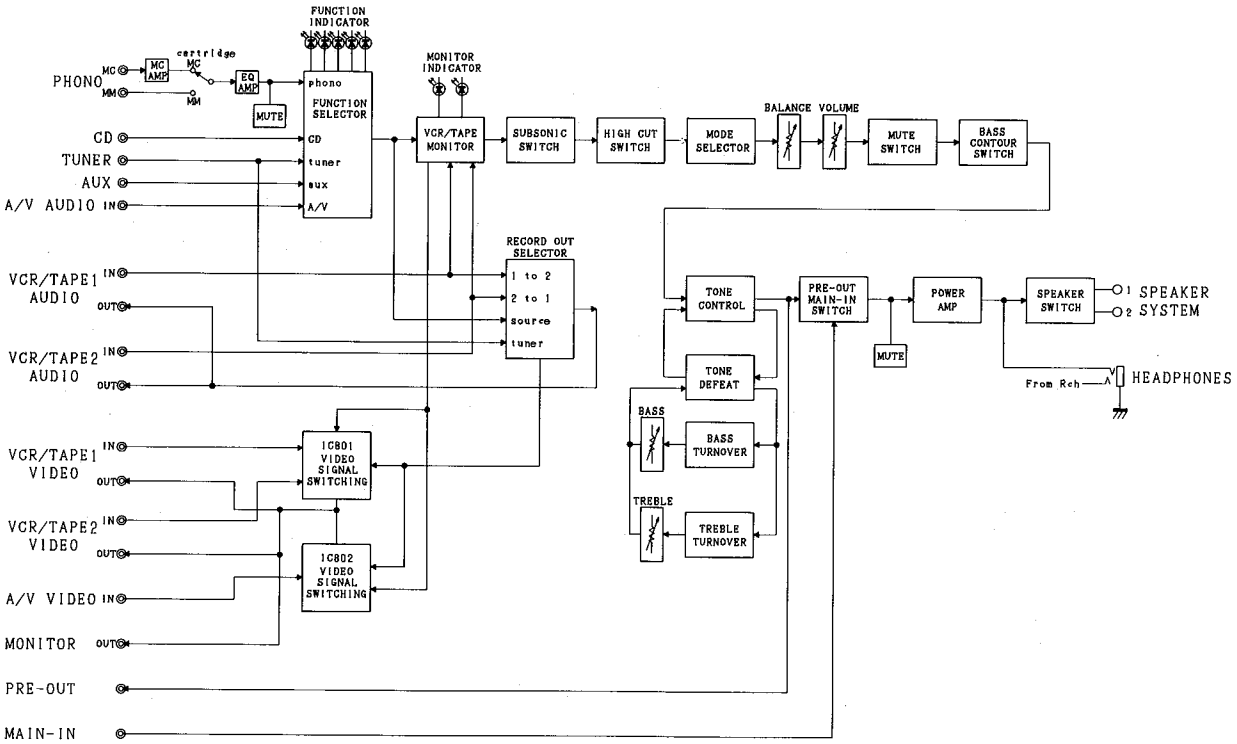
Step	Connection Equipments	Adjustment	For
1	Connect the Digital Volt Meter to TP1 and TP2.	VR401	0±10mV
2	Connect the Digital Volt Meter to TP3 and TP2.	VR402	0±10mV

■ IDLING CURRENT ADJUSTMENT

Step	Connection Equipments	Adjustment	For
1	Connect the Digital Volt Meter to TP4 and TP5.	VR403	30mV
2	Connect the Digital Volt Meter to TP6 and TP7.	VR404	30mV

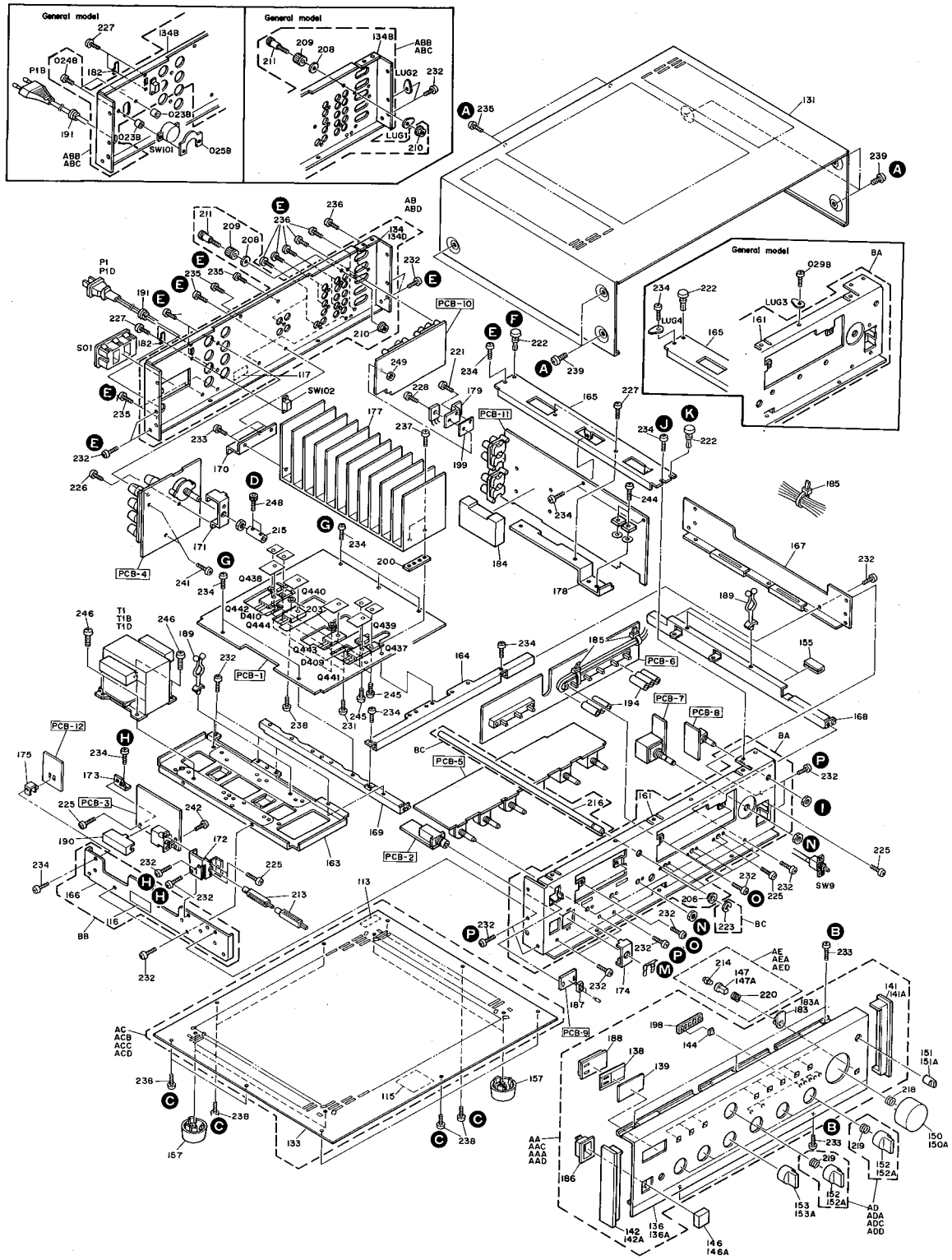
■ After the above adjustment, leave the unit with its power on for longer than 15 minutes and then repeat the same adjustment.

BLOCK DIAGRAM



GENERAL UNIT

EXPLODED VIEW

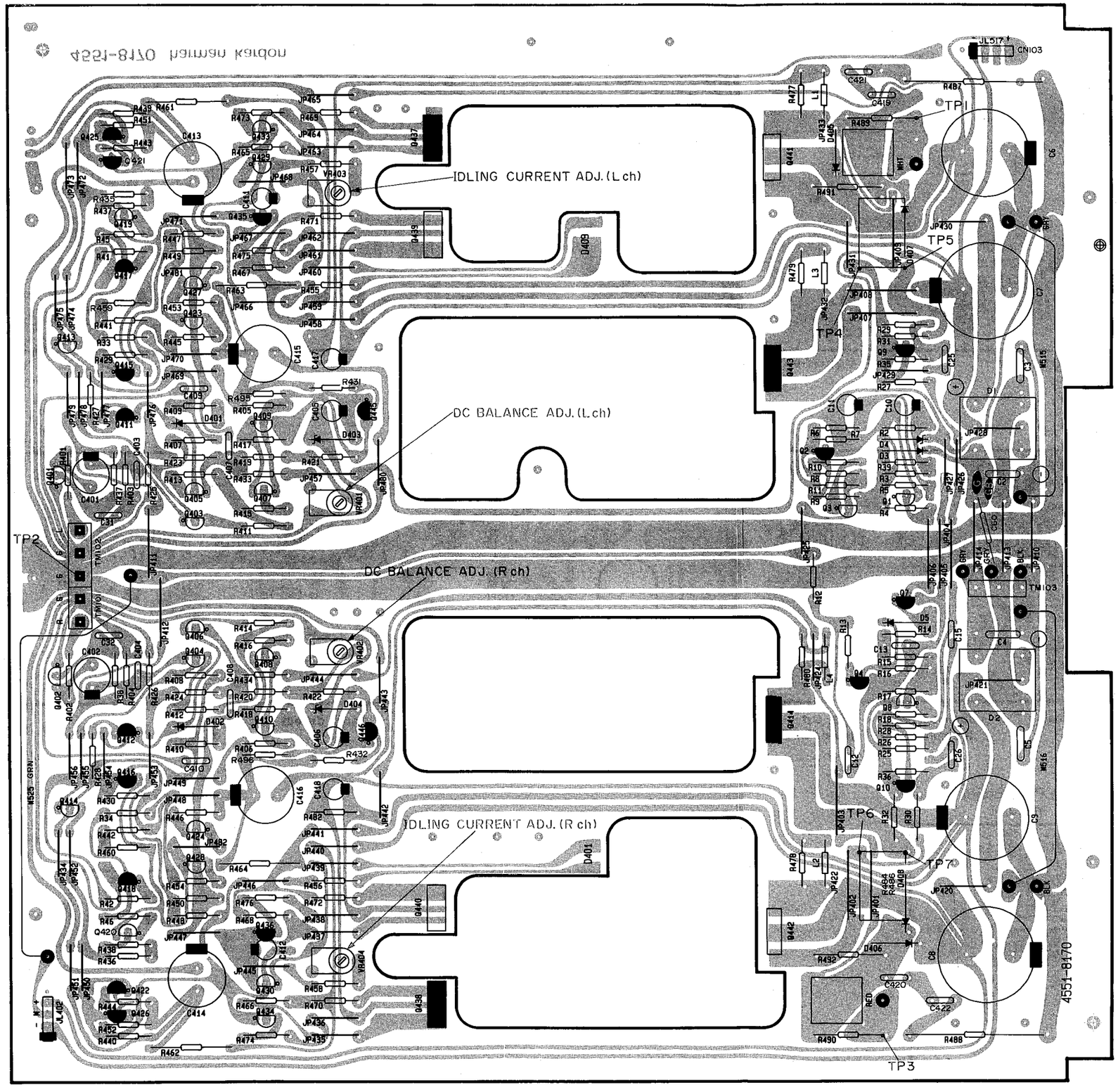


PARTS LIST

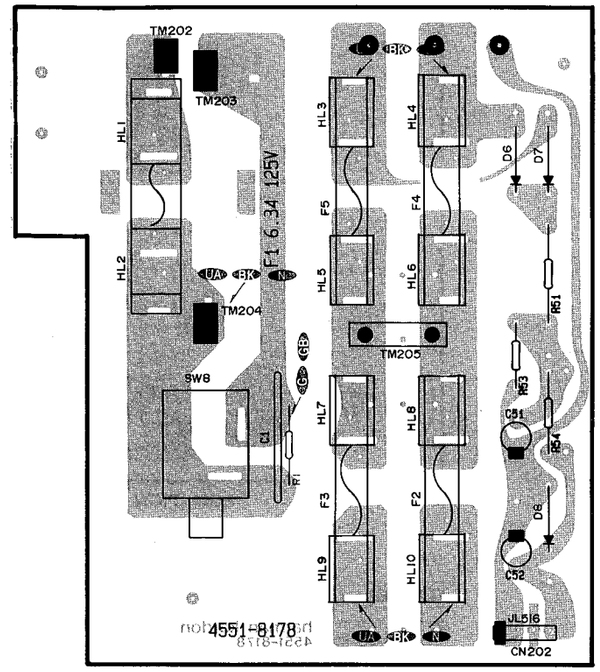
Ref. No.	Part No.	Description
AA	A443-PM655S2A	FRONT PANEL ASS'Y (UA) (G)
AAA	A443-PM655S2B	FRONT PANEL ASS'Y (BK)
AAC	A443-PM655S2C	FRONT PANEL ASS'Y (GB)
AAD	A443-PM655S2D	FRONT PANEL ASS'Y (N)
AB	A424-PM655S2A	CABINET BACK ASS'Y (UA) (BK)
ABB	A424-PM655S2B	CABINET BACK ASS'Y (G)
ABC	A424-PM655S2C	CABINET BACK ASS'Y (GB)
ABD	A424-PM655S2D	CABINET BACK ASS'Y (N)
AC	A423-PM655S2A	CABINET BOTTOM ASS'Y (UA) (BK)
ACB	A423-PM655S2B	CABINET BOTTOM ASS'Y (G)
ACC	A423-PM655S2C	CABINET BOTTOM ASS'Y (GB)
ACD	A423-PM655S2D	CABINET BOTTOM ASS'Y (N)
AD	A630-PM655S2A	ROTARY KNOB FUNCTION SWITCH ASS'Y (UA) (G)
ADA	A630-PM655S2B	ROTARY KNOB FUNCTION SWITCH ASS'Y (BK)
ADC	A630-PM655S2C	ROTARY KNOB FUNCTION SWITCH ASS'Y (GB)
ADD	A630-PM655S2D	ROTARY KNOB FUNCTION SWITCH ASS'Y (N)
AE	A662-PM655S2A	PUSH BUTTON ASS'Y (UA) (G)
AEA	A662-PM655S2B	PUSH BUTTON ASS'Y (BK)
AED	A662-PM655S2D	PUSH BUTTON ASS'Y (N)
BA	B211-PM655S2A	CHASSIS ASS'Y
BB	B219-PM655S2A	METAL FITTING ASS'Y
BC	B601-PM655S2A	SHAFT ASS'Y
023B	2132-7116	SPACER (G) (GB)
024B	2327-R0130124	SCREW, BND+ (G) (GB)
025B	2440-7017	NUT, SPE (G) (GB)
029B	2347-300526	SCREW, BND+ (G) (GB)
113	1117-78	SERIAL LABEL
115	1751-01018	LABEL (UA) (BK) (N)
116	1756-05910	LABEL, FUSE CAUTION
117	1756-CSA	LABEL (UA) (BK) (N)
131	1414-10401	CABINET TOP
133	1423-03101	CABINET BOTTOM
134	1424-22801	CABINET BACK (UA) (BK)
134B	1424-22803	CABINET BACK (G) (GB)
134D	1424-22802	CABINET BACK (N)
136	1443-10901	FRONT PANEL (UA) (G)
136A	1443-10902	FRONT PANEL (BK) (GB) (N)
138	1513-09501	PANEL, PLATE
139	1531-11304	PANEL, WINDOW
141	1562-01602	FRAME, RIGHT (UA) (G)
141A	1562-01603	FRAME, RIGHT (BK) (GB) (N)
142	1562-01702	FRAME, LEFT (UA) (G)
142A	1562-01703	FRAME, LEFT (BK) (GB) (N)
144	1732-02401	INDICATOR
146	1660-00401	PUSH BUTTON, POWER (UA) (G)
146A	1660-00403	PUSH BUTTON, POWER (BK) (GB) (N)
147	1662-05701VN	PUSH BUTTON (UA) (G)
147A	1662-05702	PUSH BUTTON (BK) (GB) (N)
150	1630-02901	ROTARY KNOB, VOLUME (UA) (G)
150A	1630-02903	ROTARY KNOB, VOLUME (BK) (GB) (N)
151	1634-04501	ROTARY KNOB, CAPTRIM (UA) (G)
151A	1634-04503	ROTARY KNOB, CAPTRIM (BK) (GB) (N)
152	1630-02801	ROTARY KNOB, FUCTION SWITCH (UA) (G)
152A	1630-02803	ROTARY KNOB, FUCTION SWITCH (BK) (GB) (N)
153	1630-02801	ROTARY KNOB (UA) (G)
153A	1630-02803	ROTARY KNOB (BK) (GB) (N)
155	1568-00301	FRAME
157	1319-0139	LEG
161	2211-7260	CHASSIS
163	2219-8036	METAL FITTING, TRANS
164	2219-8008	METAL FITTING, H.CENTER
165	2219-8009	METAL FITTING, EQ
166	2219-8010	METAL FITTING, TRANS SIDE
167	2219-8011	METAL FITTING, EQ SIDE
168	2219-8012	METAL FITTING, EQ CENTER
169	2219-8013	METAL FITTING, TRANS CENTER
170	2219-8014	METAL FITTING, METAL HEAT
171	2219-8015	METAL FITTING, SPRING SWITCH
172	2219-8016	METAL FITTING, POWER SWITCH
173	2219-8019	METAL FITTING, POWER PCB
174	2219-7879	METAL FITTING, H/P
175	2219-8035	METAL FITTING, 4/8Ω PCB
177	2222-7173	HEAT SINK, MAIN
178	2222-7183	HEAT SINK, EQ
179	2222-7229	HEAT SINK, AV PCB
183	2240-7141	HOLDER (UA) (G)
183A	2240-7202	HOLDER (BK) (GB) (N)
184	2240-7183	HOLDER, MC
185	2240-7120	HOLDER, WIRING
186	2240-7109	HOLDER, POWER
187	2240-7315	HOLDER, LED
188	2240-7316	HOLDER, PANEL
189	2240-7050	HOLDER, EQ×2 TRANS×2
190	2240-7176	HOLDER, FUSE
191	2240-364	HOLDER, AC CORD
194	2132-7126	SPACER, LED
198	2112-0040	SPONGE, LED
199	2224-7120	INSULATOR, AV.HEAT
200	2224-7120	INSULATOR
203	2402-0374	WASHER, PLASTIC
206	2410-100	WASHER, SPE
208	2410-7005	WASHER, SPE
209	2440-7011	NUT, SPE
210	2440-7016	NUT, SPE
211	2310-7015	SCREW, SPE
213	2672-7018	LEVER, POWER SHAFT
214	2601-7077	SHAFT
215	2601-7069	SHAFT, SPRING
216	2601-7131	SHAFT
218	2651-110518	SPRING, VOLUME
219	2651-110518	SPRING, SWITCH
220	2651-210189	SPRING, PUSH BUTTON
221	2459-3005511	RIVET, PLASTIC
222	2459-3003511	RIVET, PLASTIC
223	2461-501	STOPPER, E
225	2327-R0130064	SCREW, BND+
226	2327-R0130064	SCREW, BND+
227	2327-R0130064	SCREW, BND+
228	2327-R0130122	SCREW, BND+
231	2347-R0130062	SCREW, BND T+
232	2347-R0130062	SCREW, BND T+
233	2347-R0130062	SCREW, BND T+
234	2347-R0130062	SCREW, BND T+
235	2347-R0130084	SCREW, BND T+
236	2347-R0130084	SCREW, BND T+
237	2347-R0130102	SCREW, BND T+
238	2347-R0130102	SCREW, BND T+
239	2347-R0140064	SCREW, BND T+
241	2343-300826	SCREW, CSK T+
242	2343-300826	SCREW, CSK T+
244	2557-301029	SCREW, B SPW+
245	2557-301029	SCREW, B SPW+
246	2557-400829	SCREW, B SPW+
248	2396-300549	SCREW, SK HEX
249	2440-7016	NUT, SPE
⚠PI	4161-71151	CORD W/PLUG (UA) (BK)
⚠PIB	4161-7256	CORD W/PLUG (G) (GB)
⚠PID	4161-71148	CORD W/PLUG (N)
⚠TI	5582-S02	XFORMER, POWER (UA) (BK)
⚠TIB	5582-S03	XFORMER, POWER (G) (GB)
⚠TID	5582-S04	XFORMER, POWER (N)
⚠SOI	4474-156	SOCKET, AC OUTLET (UA) (BK) (N)
LUG1	4211-4	LUG (G) (GB)
LUG2	4211-4	LUG (G) (GB)
LUG3	4211-4	LUG (G) (GB)
LUG4	4211-4	LUG (G) (GB)
SW9	4422-70211	SWITCH, REMOTE
⚠SW101	4411-102729	SWITCH, ROTARY (G) (GB)
SW102	4421-0227230	SLIDE SWITCH
Q437	5611-1111(Q)or(R)	XISTOR,PNP R
Q438	5611-1111(Q)or(R)	XISTOR,PNP R
Q439	5613-2591(Q)or(R)	XISTOR,NPN R
Q440	5613-2591(Q)or(R)	XISTOR,NPN R
Q441	5613-3281(O)or(R)	XISTOR,NPN R
Q442	5613-3281(O)or(R)	XISTOR,NPN R
Q443	5611-1302(O)or(R)	XISTOR,PNP R
Q444	5611-1302(O)or(R)	XISTOR,PNP R
Q623	5613-3298(O)or(Y)	XISTOR,NPN R
Q624	5611-1306(O)or(Y)	XISTOR,PNP R
D409	5641-MV12YM	VARISTOR
D410	5641-MV12YM	VARISTOR

P. C. BOARDS

PCB-1 Main Driver P. C. Board

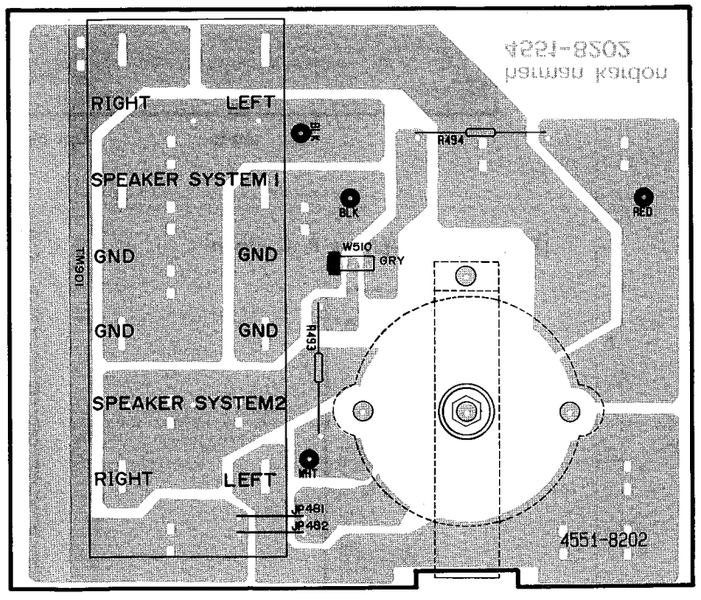


PCB-3 Fuse P. C. Board



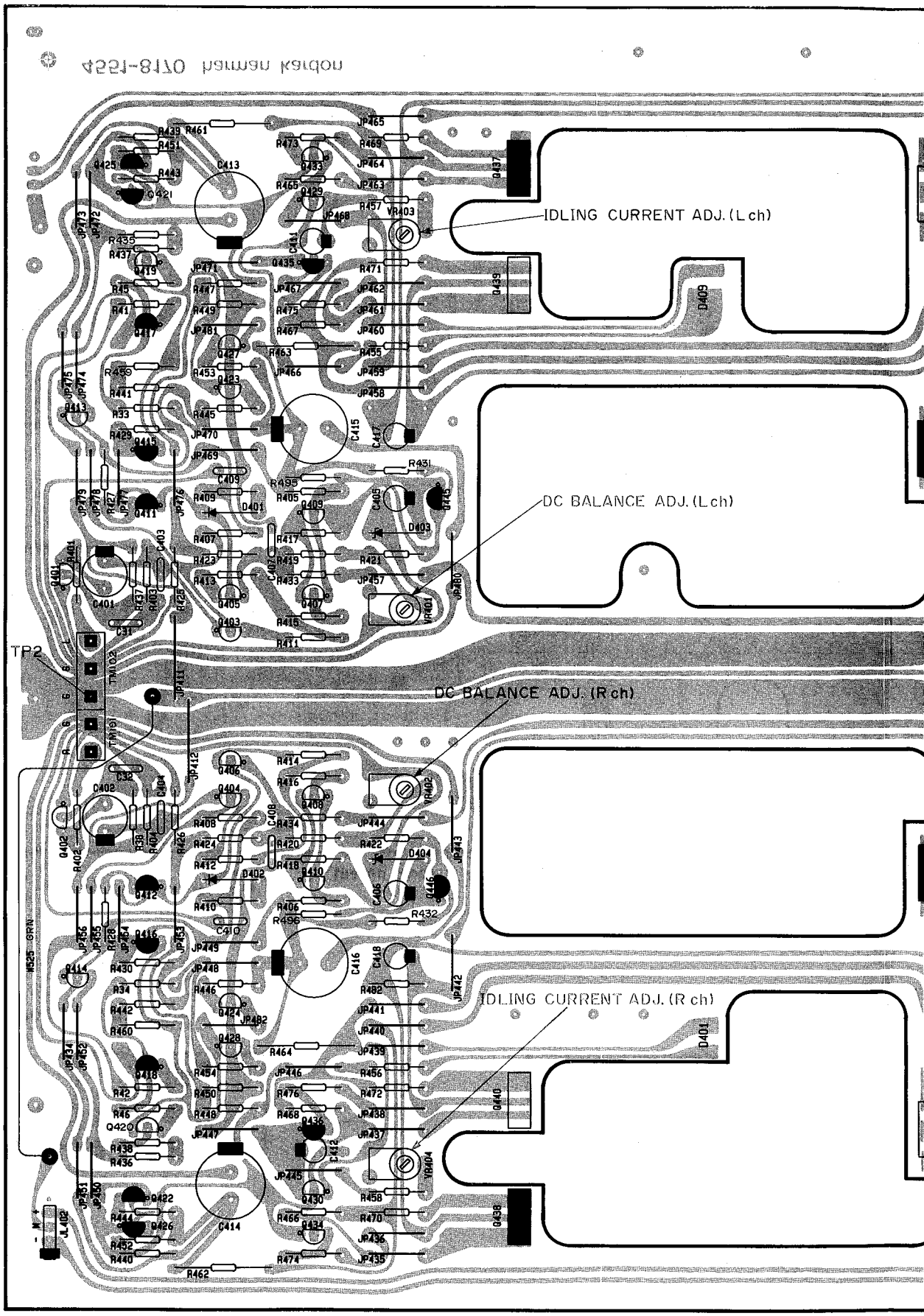
POWER

PCB-4 Speaker P. C. Board

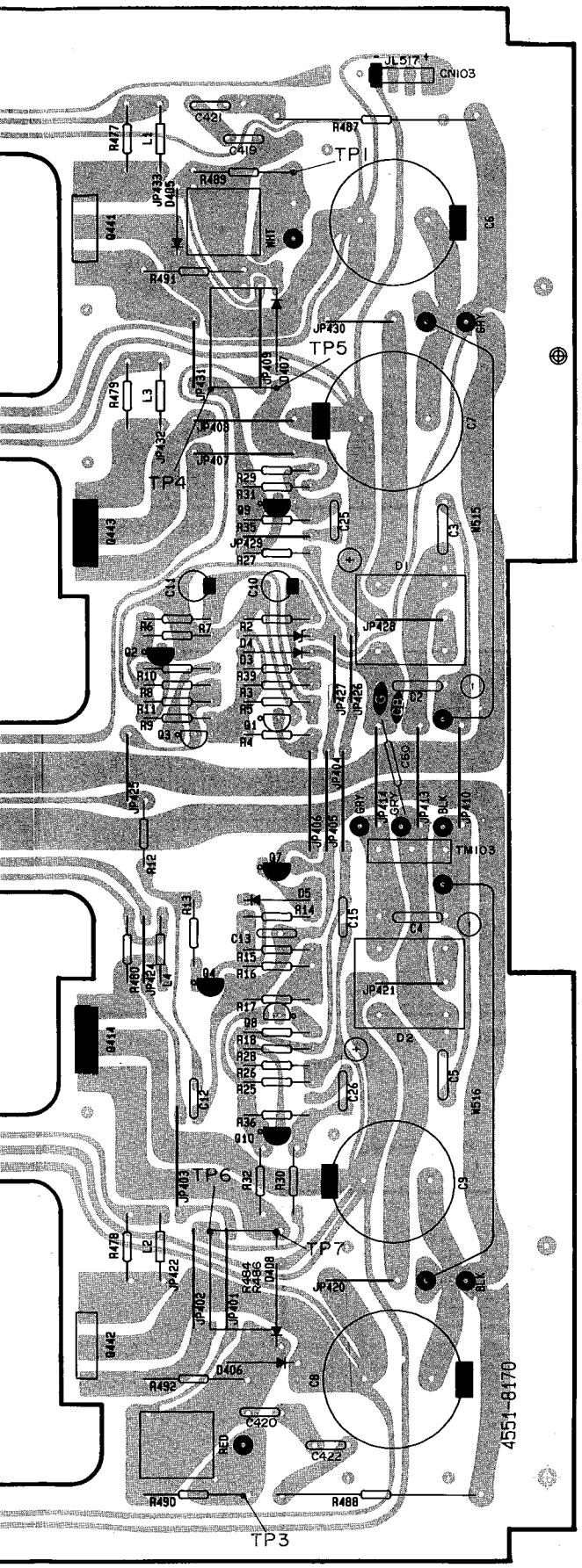


P. C. BOARDS

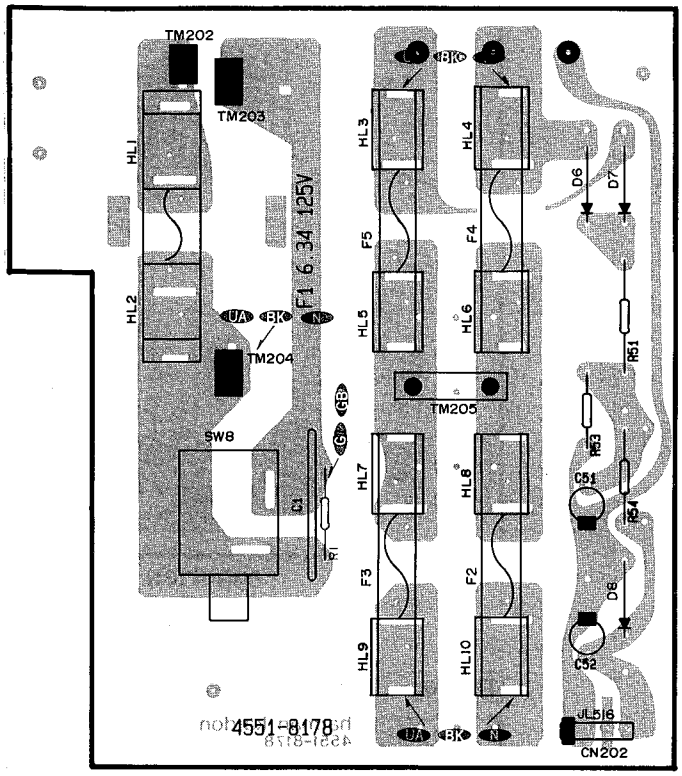
PCB-1 **Main Driver P. C. Board**



E	F	G	H	I	J

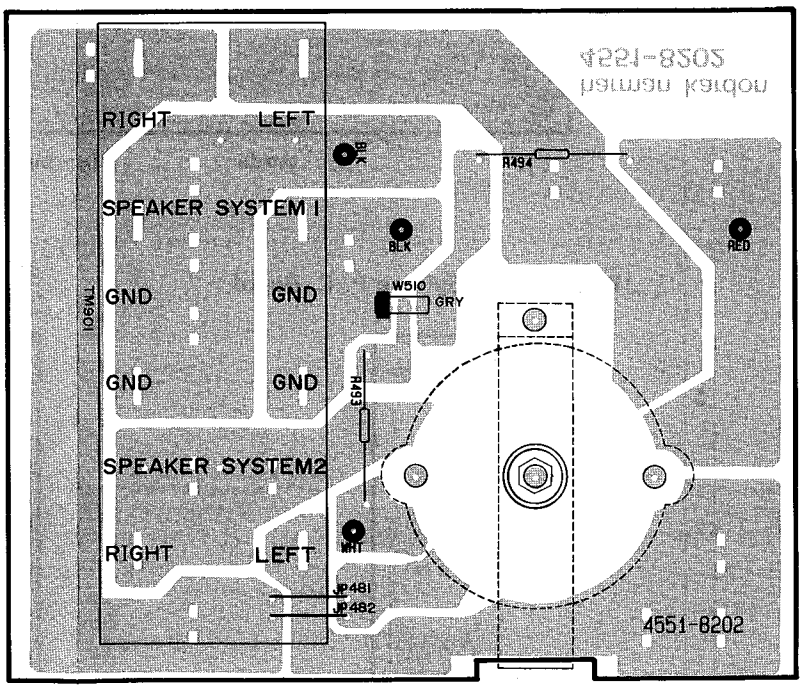


PCB-3 **Fuse P. C. Board**



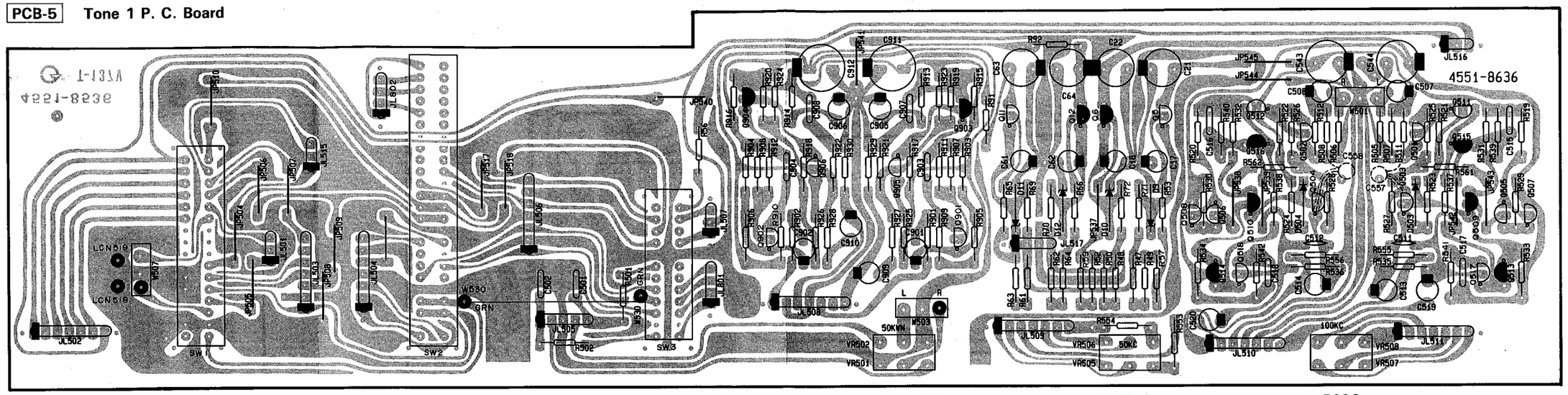
POWER

PCB-4 **Speaker P. C. Board**

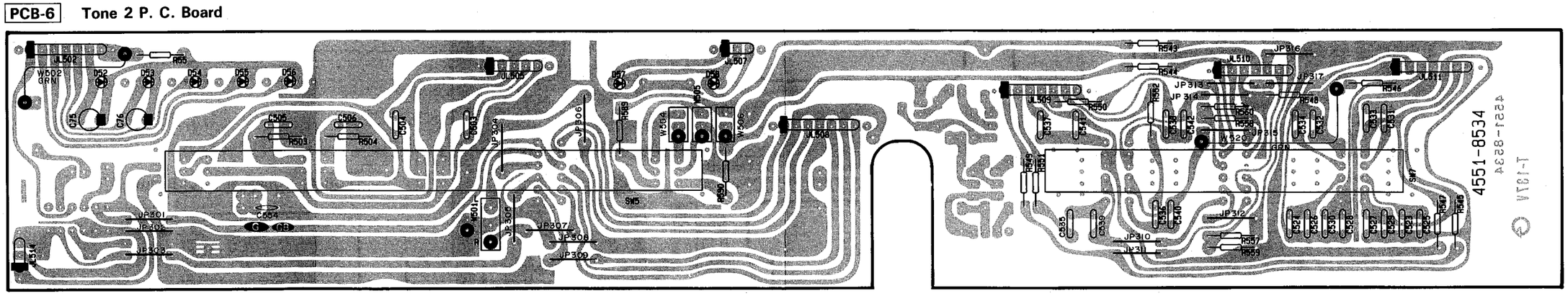


P. C. BOARDS

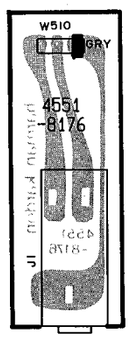
PCB-5 Tone 1 P. C. Board



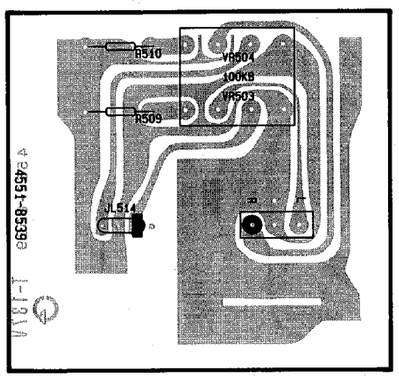
PCB-6 Tone 2 P. C. Board



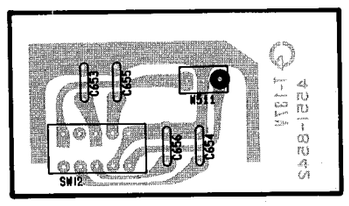
PCB-2 Headphone P. C. Board



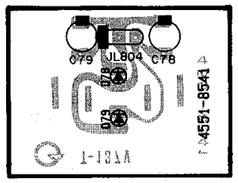
PCB-7 Volume P. C. Board



PCB-8 Capacitance Trim P. C. Board

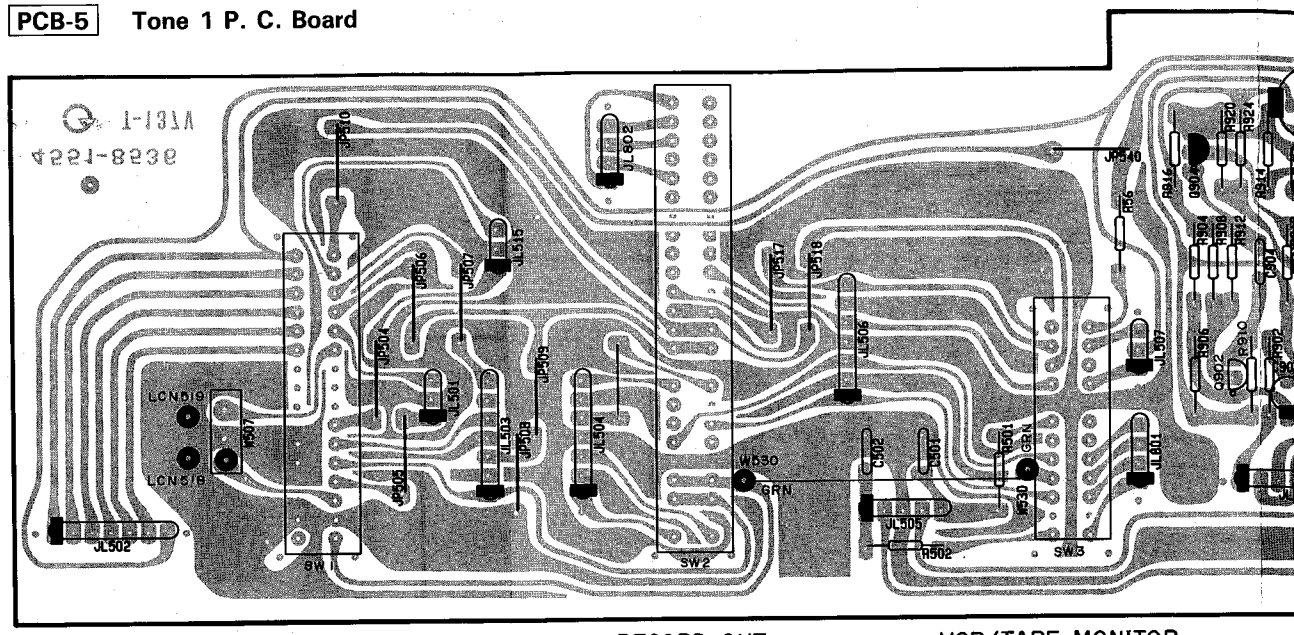


PCB-9 4/8Ω LED P. C. Board



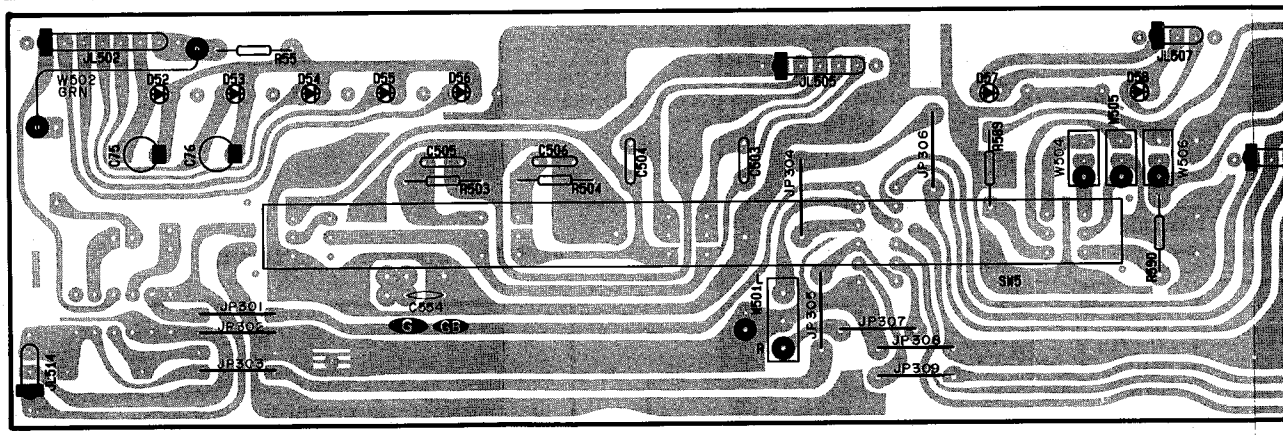
P. C. BOARDS

PCB-5 Tone 1 P. C. Board



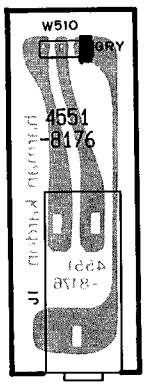
FUNCTION RECORD OUT VCR/TAPE MONITOR

PCB-6 Tone 2 P. C. Board



mode high cut subsonic phase-correct loudness pre-out main-in

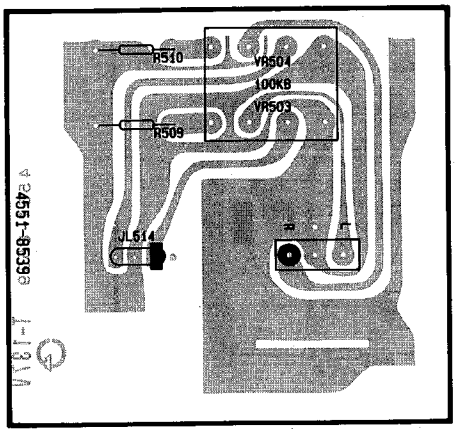
PCB-2 Headphone P. C. Board

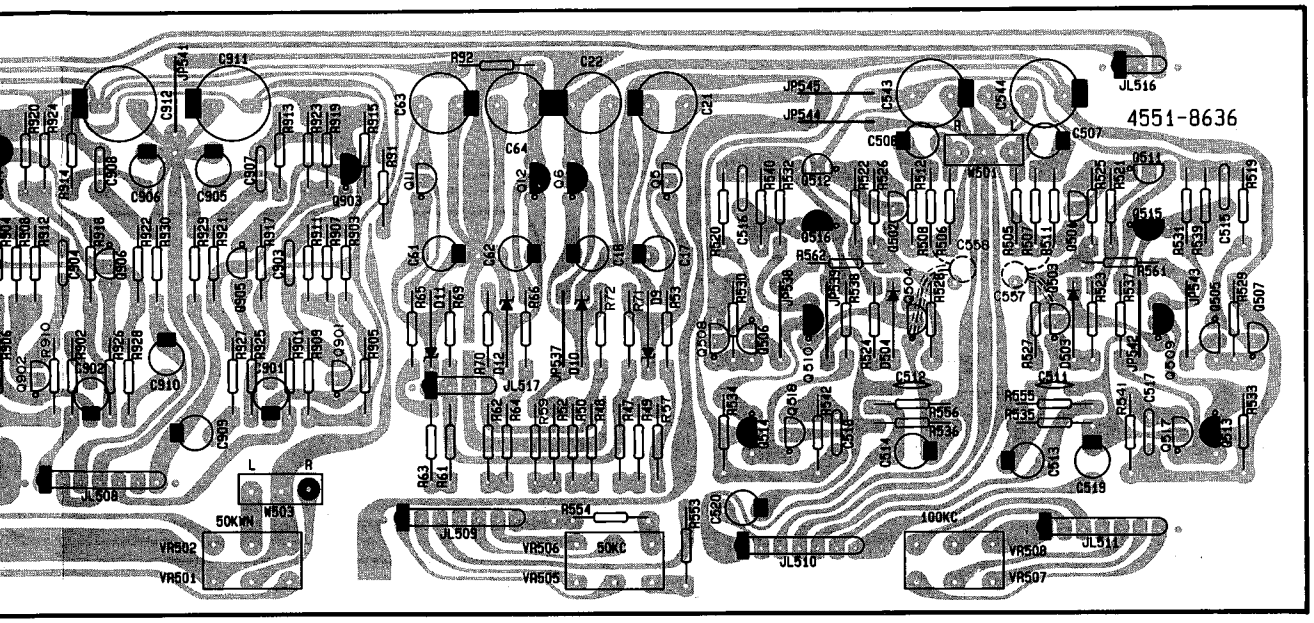


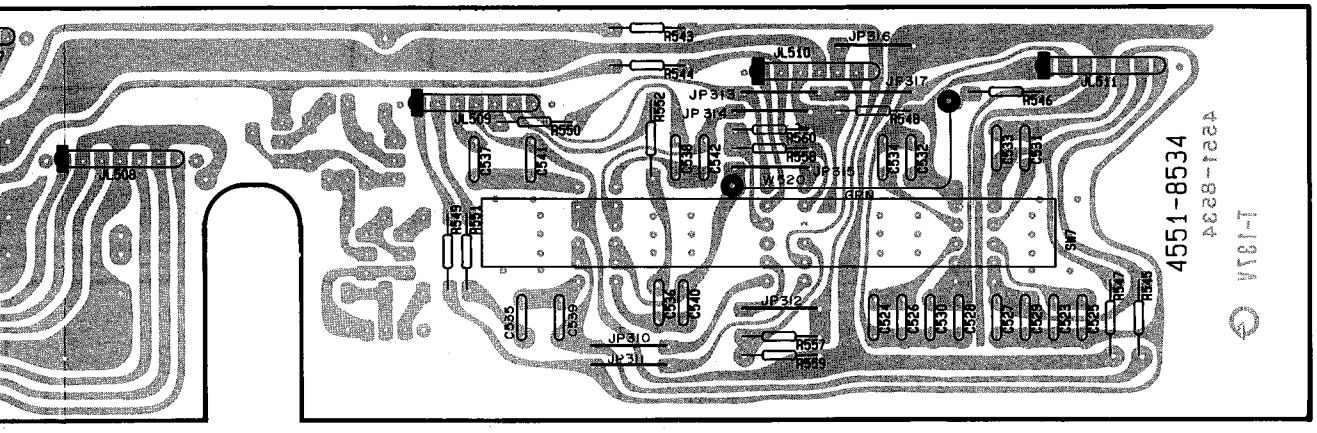
HEADPHONES

PCB-7 Volume P. C. Board

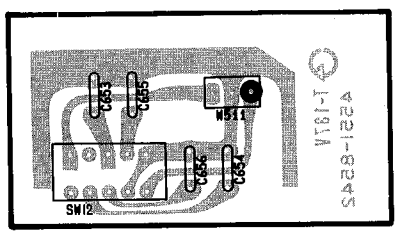
VOLUME



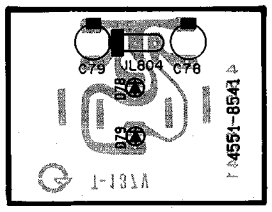




PCB-8 Capacitance Trim P. C. Board

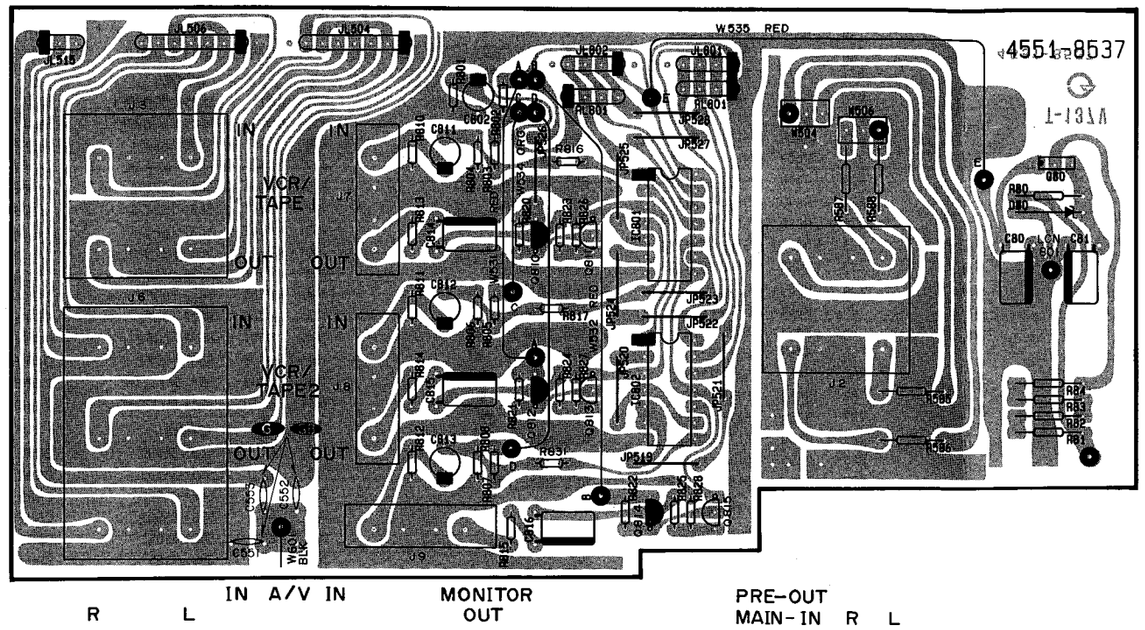


PCB-9 4/8Ω LED P. C. Board

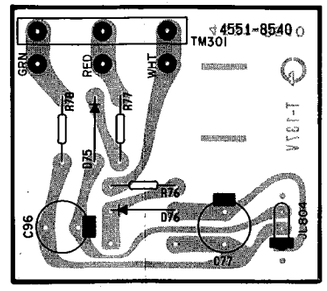


P. C. BOARDS

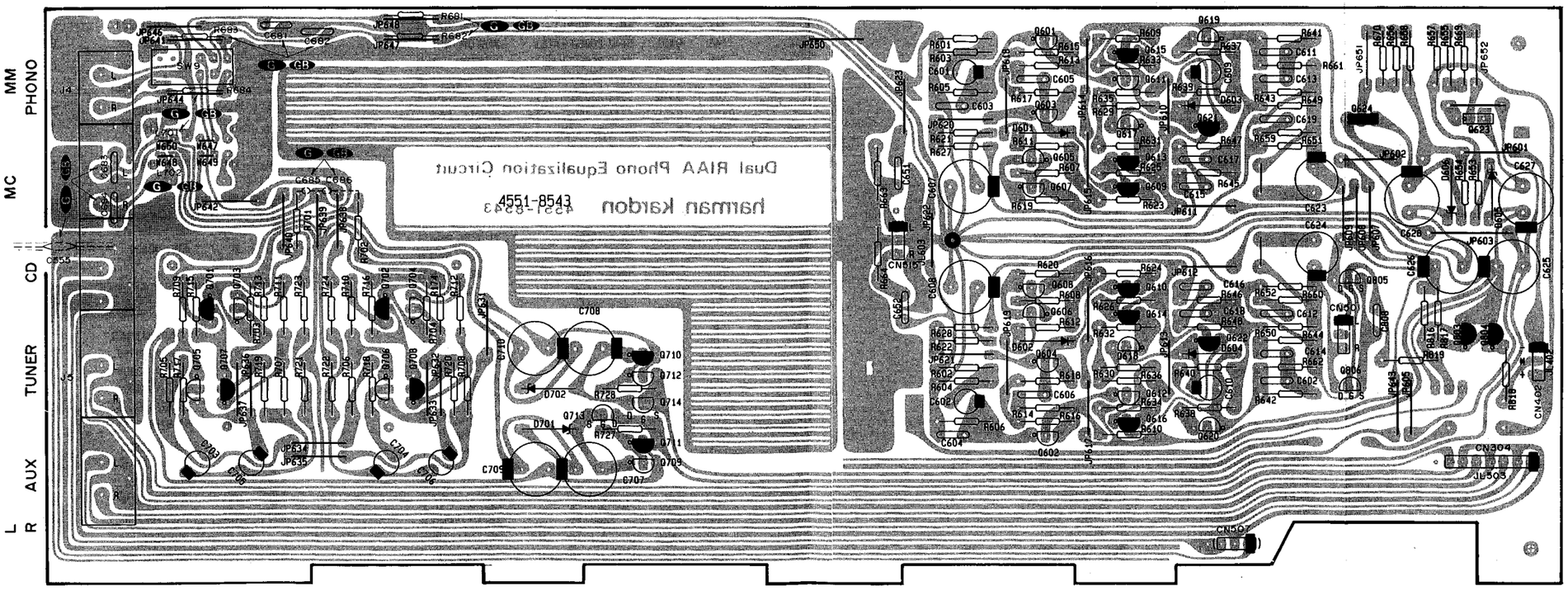
PCB-10 Pin Jack P. C. Board



PCB-12 4/8Ω P. C. Board

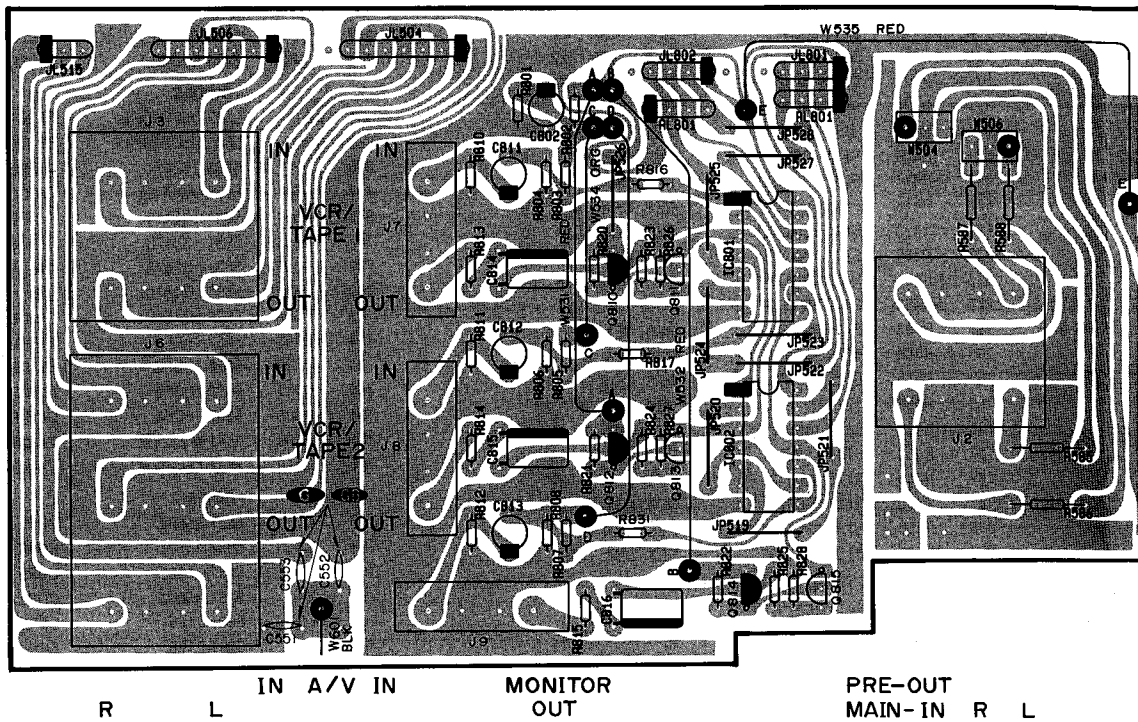


PCB-11 Equalizer P. C. Board
Cartridge



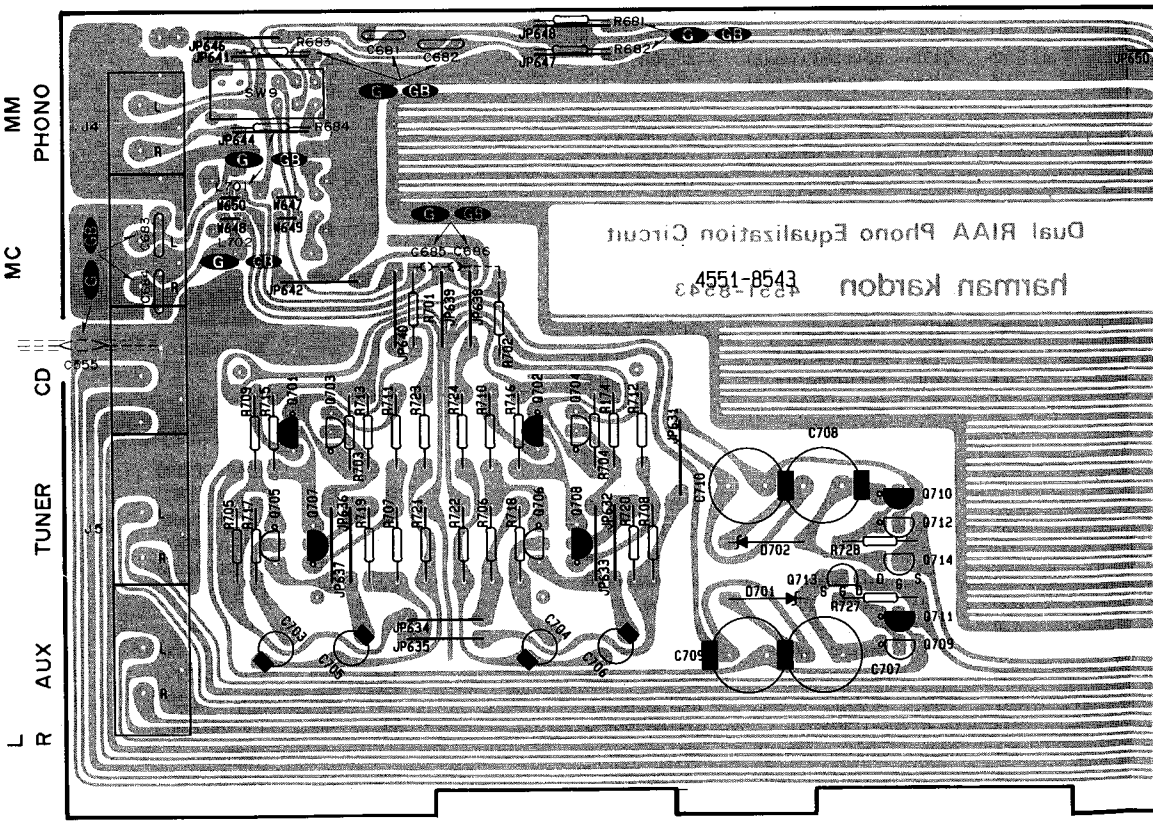
P. C. BOARDS

PCB-10 Pin Jack P. C. Board

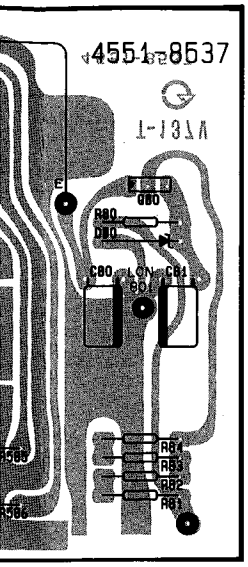


PCB-11 Equalizer P. C. Board

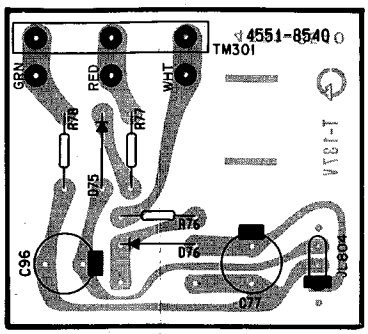
Cartridge

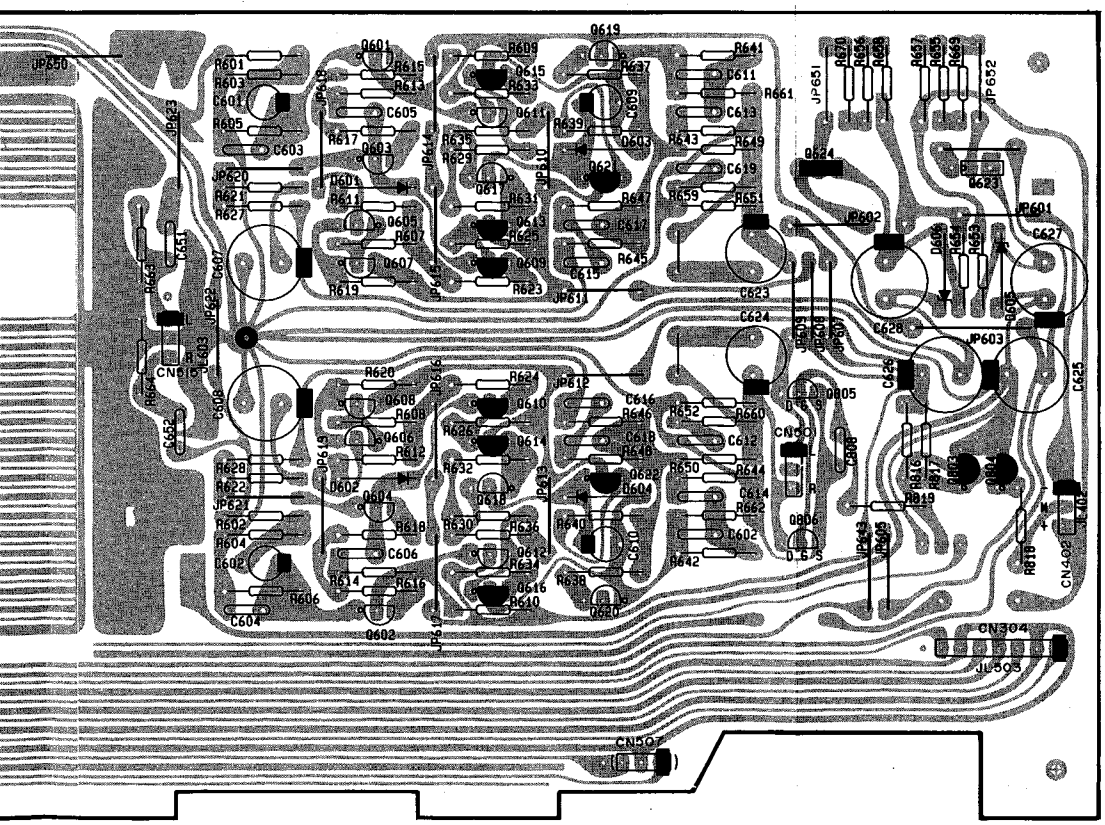


E | F | G | H | I | J



PCB-12 **4/8Ω P. C. Board**





ELECTRICAL PARTS LIST

Ser. No.	Ref. No.	Part No.	Description
		PCB-1 MAIN P.C.BOARD	
		CAPACITORS	
864	C2	5352-1041957	CAP, MTL .1μ
864	C3	5352-1041957	CAP, MTL .1μ
864	C4	5352-1041957	CAP, MTL .1μ
864	C5	5352-1041957	CAP, MTL .1μ
870	⚠C6	5341-002GM688	CAP, ELE 6800μ/63V
870	⚠C7	5341-002GM688	CAP, ELE 6800μ/63V
870	⚠C8	5341-002GM688	CAP, ELE 6800μ/63V
870	⚠C9	5341-002GM688	CAP, ELE 6800μ/63V
841	C10	5345-475F0952	CAP, MINI ELE 4.7μ/50V
842	C11	5345-336B0952	CAP, MINI ELE 33μ/10V
843	C12	5354-334593	CAP, MYL .33μ
843	C13	5354-334593	CAP, MYL .33μ
846	C15	5353-330534	CAP, MCA 33p
845	C25	5354-683J1HM	CAP, MYL .068μ
845	C26	5354-683J1HM	CAP, MYL .068μ
844	C31	5354-104593	CAP, MYL .1μ
844	C32	5354-104593	CAP, MYL .1μ
062B	C60	5352-1040962	CAP, MTL .1μ (G) (GB)
771	C401	5345-107B0951	CAP, MINI ELE 100μ/10V
771	C402	5345-107B0951	CAP, MINI ELE 100μ/10V
776	C403	5353-271534	CAP, MCA 270p
776	C404	5353-271534	CAP, MCA 270p
773	C405	5345-476D041	CAP, MINI ELE 47μ/25V
773	C406	5345-476D041	CAP, MINI ELE 47μ/25V
780	C407	5353-020934	CAP, MCA 2p
780	C408	5353-020934	CAP, MCA 2p
781	C409	5353-680534	CAP, MCA 68p
781	C410	5353-680534	CAP, MCA 68p
772	C411	5345-106C041	CAP, MINI ELE 10μ/16V
772	C412	5345-106C041	CAP, MINI ELE 10μ/16V
774	C413	5345-337G0962	CAP, MINI ELE 330μ/63V
774	C414	5345-337G0962	CAP, MINI ELE 330μ/63V
774	C415	5345-337G0962	CAP, MINI ELE 330μ/63V
774	C416	5345-337G0962	CAP, MINI ELE 330μ/63V
772	C417	5345-106C041	CAP, MINI ELE 10μ/16V
772	C418	5345-106C041	CAP, MINI ELE 10μ/16V
778	C419	5354-683J1HM	CAP, MYL .068μ
778	C420	5354-683J1HM	CAP, MYL .068μ
778	C421	5354-683J1HM	CAP, MYL .068μ
778	C422	5354-683J1HM	CAP, MYL .068μ
		RESISTORS	
851	R2	5134-103J25P	RES, CBN 1/4P 10K
858	R3	5134-472J25P	RES, CBN 1/4P 4.7K
855	R4	5134-473J25P	RES, CBN 1/4P 47K
854	R5	5134-334J25P	RES, CBN 1/4P 330K
852	R6	5134-684J25P	RES, CBN 1/4P 680K
857	R7	5134-184J25P	RES, CBN 1/4P 180K
853	R8	5134-225J25P	RES, CBN 1/4P 2.2M
850	R9	5134-104J25P	RES, CBN 1/4P 100K
850	R10	5134-104J25P	RES, CBN 1/4P 100K
851	R11	5134-103J25P	RES, CBN 1/4P 10K
850	R12	5134-104J25P	RES, CBN 1/4P 100K
855	R13	5134-473J25P	RES, CBN 1/4P 47K
856	R14	5134-223J25P	RES, CBN 1/4P 22K
856	R15	5134-223J25P	RES, CBN 1/4P 22K
855	R16	5134-473J25P	RES, CBN 1/4P 47K
851	R17	5134-103J25P	RES, CBN 1/4P 10K
856	R18	5134-223J25P	RES, CBN 1/4P 22K
850	R25	5134-104J25P	RES, CBN 1/4P 100K
855	R26	5134-473J25P	RES, CBN 1/4P 47K
858	R27	5134-472J25P	RES, CBN 1/4P 4.7K
858	R28	5134-472J25P	RES, CBN 1/4P 4.7K
858	R29	5134-472J25P	RES, CBN 1/4P 4.7K
858	R30	5134-472J25P	RES, CBN 1/4P 4.7K
858	R31	5134-472J25P	RES, CBN 1/4P 4.7K
858	R32	5134-472J25P	RES, CBN 1/4P 4.7K
856	R33	5134-223J25P	RES, CBN 1/4P 22K
856	R34	5134-223J25P	RES, CBN 1/4P 22K
847	R35	5134-332J25P	RES, CBN 1/4P 3.3K
847	R36	5134-332J25P	RES, CBN 1/4P 3.3K
849	R37	5134-105J25P	RES, CBN 1/4P 1M
849	R38	5134-105J25P	RES, CBN 1/4P 1M
848	R39	5134-332J25P	RES, CBN 1/4P 3.3K
856	R41	5134-223J25P	RES, CBN 1/4P 22K
856	R42	5134-223J25P	RES, CBN 1/4P 22K
856	R45	5134-223J25P	RES, CBN 1/4P 22K
856	R46	5134-223J25P	RES, CBN 1/4P 22K
808	R401	5134-102J25P	RES, CBN 1/4P 1K
808	R402	5134-102J25P	RES, CBN 1/4P 1K
809	R403	5134-223J25P	RES, CBN 1/4P 22K
809	R404	5134-223J25P	RES, CBN 1/4P 22K
810	R405	5134-683J25P	RES, CBN 1/4P 68K
810	R406	5134-683J25P	RES, CBN 1/4P 68K
811	R407	5134-122J25P	RES, CBN 1/4P 1.2K
811	R408	5134-122J25P	RES, CBN 1/4P 1.2K
811	R409	5134-122J25P	RES, CBN 1/4P 1.2K
811	R410	5134-122J25P	RES, CBN 1/4P 1.2K
812	R411	5134-181J25P	RES, CBN 1/4P 180
812	R412	5134-181J25P	RES, CBN 1/4P 180
812	R413	5134-181J25P	RES, CBN 1/4P 180
812	R414	5134-181J25P	RES, CBN 1/4P 180
813	R415	5134-562J25P	RES, CBN 1/4P 5.6K
813	R416	5134-562J25P	RES, CBN 1/4P 5.6K
814	R417	5134-331J25P	RES, CBN 1/4P 330
814	R418	5134-331J25P	RES, CBN 1/4P 330
815	R419	5134-393J25P	RES, CBN 1/4P 39K
815	R420	5134-393J25P	RES, CBN 1/4P 39K
816	R421	5134-473J25P	RES, CBN 1/4P 47K
816	R422	5134-473J25P	RES, CBN 1/4P 47K
802	R423	5174-471381	RES, MTL 1/4 470
802	R424	5174-471381	RES, MTL 1/4 470
801	R425	5174-220381	RES, MTL 1/4 22
801	R426	5174-220381	RES, MTL 1/4 22
797	⚠R427	5102-5614713	RES, FUSE 560
797	⚠R428	5102-5614713	RES, FUSE 560
797	⚠R429	5102-5614713	RES, FUSE 560
797	⚠R430	5102-5614713	RES, FUSE 560
813	R431	5134-562J25P	RES, CBN 1/4P 5.6K
813	R432	5134-562J25P	RES, CBN 1/4P 5.6K
803	R433	5174-243381	RES, MTL 1/4 24K
803	R434	5174-243381	RES, MTL 1/4 24K
818	R435	5134-123J25P	RES, CBN 1/4P 12K
818	R436	5134-123J25P	RES, CBN 1/4P 12K
818	R437	5134-123J25P	RES, CBN 1/4P 12K
818	R438	5134-123J25P	RES, CBN 1/4P 12K
817	R439	5134-222J25P	RES, CBN 1/4P 2.2K
817	R440	5134-222J25P	RES, CBN 1/4P 2.2K
817	R441	5134-222J25P	RES, CBN 1/4P 2.2K
817	R442	5134-222J25P	RES, CBN 1/4P 2.2K
795	⚠R443	5102-1514713	RES, FUSE 150
795	⚠R444	5102-1514713	RES, FUSE 150
795	⚠R445	5102-1514713	RES, FUSE 150
795	⚠R446	5102-1514713	RES, FUSE 150
804	R447	5174-123381	RES, MTL 1/4 12K
804	R448	5174-123381	RES, MTL 1/4 12K
804	R449	5174-123381	RES, MTL 1/4 12K
804	R450	5174-123381	RES, MTL 1/4 12K
795	⚠R451	5102-1514713	RES, FUSE 150
795	⚠R452	5102-1514713	RES, FUSE 150
795	⚠R453	5102-1514713	RES, FUSE 150
795	⚠R454	5102-1514713	RES, FUSE 150
819	R455	5134-561J25P	RES, CBN 1/4P 560
819	R456	5134-561J25P	RES, CBN 1/4P 560
820	R457	5134-471J25P	RES, CBN 1/4P 470
820	R458	5134-471J25P	RES, CBN 1/4P 470
807	R459	5134-131J25P	RES, CBN 1/4P 130
807	R460	5134-131J25P	RES, CBN 1/4P 130
794	⚠R461	5102-2205711	RES, FUSE 22
794	⚠R462	5102-2205711	RES, FUSE 22
794	⚠R463	5102-2205711	RES, FUSE 22
794	⚠R464	5102-2205711	RES, FUSE 22
796	⚠R465	5102-1014713	RES, FUSE 100
796	⚠R466	5102-1014713	RES, FUSE 100
796	⚠R467	5102-1014713	RES, FUSE 100
796	⚠R468	5102-1014713	RES, FUSE 100
798	⚠R469	5102-2R2579	RES, FUSE 2.2
798	⚠R470	5102-2R2579	RES, FUSE 2.2
798	⚠R471	5102-2R2579	RES, FUSE 2.2
798	⚠R472	5102-2R2579	RES, FUSE 2.2
821	R473	5134-150J25P	RES, CBN 1/4P 15
821	R474	5134-150J25P	RES, CBN 1/4P 15
821	R475	5134-150J25P	RES, CBN 1/4P 15
821	R476	5134-150J25P	RES, CBN 1/4P 15
822	R477	5134-100J25P	RES, CBN 1/4P 10
822	R478	5134-100J25P	RES, CBN 1/4P 10
822	R479	5134-100J25P	RES, CBN 1/4P 10
822	R480	5134-100J25P	RES, CBN 1/4P 10
823	⚠R481	5102-6804713	RES, FUSE 68
823	⚠R482	5102-6804713	RES, FUSE 68
785	R483	5275-R27671	RES, CEM 5P .27
785	R484	5275-R27671	RES, CEM 5P .27
785	R485	5275-R27671	RES, CEM 5P .27
785	R486	5275-R27671	RES, CEM 5P .27
786	R487	5175-150571	RES, MTL 3 1S
786	R488	5175-150571	RES, MTL 3 1S
787	R489	5171-220572	RES, MTL 1 22
787	R490	5171-220572	RES, MTL 1 22
806	R495	5134-223J25P	RES, CBN 1/4P 22K
806	R496	5134-223J25P	RES, CBN 1/4P 22K
		TRANSISTORS	
831	Q1	5613-2603(E)or(F)	XISTOR, NPN R
832	Q2	5611-1115(E)or(F)	XISTOR, PNP R
831	Q3	5613-2603(E)or(F)	XISTOR, NPN R
832	Q4	5611-1115(E)or(F)	XISTOR, PNP R
832	Q7	5611-1115(E)or(F)	XISTOR, PNP R
833	Q8	5613-1845(E)or(F)	XISTOR, NPN R
834	Q9	5611-970(BL)	XISTOR, PNP R
834	Q10	5611-970(BL)	XISTOR, PNP R
835	Q401	5616-2SK364(V)or(BL)	FET, N-CH
835	Q402	5616-2SK364(V)or(BL)	FET, N-CH
741	Q403	5613-2240(BL)	XISTOR, NPN R
741	Q404	5613-2240(BL)	XISTOR, NPN R
741	Q405	5613-2240(BL)	XISTOR, NPN R
741	Q406	5613-2240(BL)	XISTOR, NPN R
745	Q407	5613-2603(F)or(E)	XISTOR, NPN R
745	Q408	5613-2603(F)or(E)	XISTOR, NPN R
745	Q409	5613-2603(F)or(E)	XISTOR, NPN R
745	Q410	5613-2603(F)or(E)	XISTOR, NPN R
747	Q411	5611-1145(O)or(Y)	XISTOR, PNP R
747	Q412	5611-1145(O)or(Y)	XISTOR, PNP R
744	Q413	5613-2240(BL)	XISTOR, NPN R
744	Q414	5613-2240(BL)	XISTOR, NPN R
742	Q415	5611-970(BL)	XISTOR, PNP R
742	Q416	5611-970(BL)	XISTOR, PNP R
743	Q417	5611-992(E)	XISTOR, PNP R
743	Q418	5611-992(E)	XISTOR, PNP R
744	Q419	5613-2240(BL)	XISTOR, NPN R
744	Q420	5613-2240(BL)	XISTOR, NPN R
765	Q421	5611-1285(F)	XISTOR, PNP R
765	Q422	5611-1285(F)	XISTOR, PNP R
746	Q423	5613-3245(F)	XISTOR, NPN R
746	Q424	5613-3245(F)	XISTOR, NPN R
765	Q425	5611-1285(F)	XISTOR, PNP R
765	Q426	5611-1285(F)	XISTOR, PNP R
746	Q427	5613-3245(F)	XISTOR, NPN R
746	Q428	5613-3245(F)	XISTOR, NPN R
750	Q429	5613-945(P)	XISTOR, NPN R
750	Q430	5613-945(P)	XISTOR, NPN R
748	Q433	5613-2235(Y)	XISTOR, NPN R
748	Q434	5613-2235(Y)	XISTOR, NPN R
749	Q435	5611-965(Y)	XISTOR, PNP R
749	Q436	5611-965(Y)	XISTOR, PNP R
754	Q437	5611-1111(Q)or(R)	XISTOR, PNP R
754	Q438	5611-1111(Q)or(R)	XISTOR, PNP R
751	Q439	5613-2591(Q)or(R)	XISTOR, NPN R
751	Q440	5613-2591(Q)or(R)	XISTOR, NPN R
757	Q441	5613-3281(O)or(R)	XISTOR, NPN R
757	Q442	5613-3281(O)or(R)	XISTOR, NPN R
759	Q443	5611-1302(O)or(R)	XISTOR, PNP R
759	Q444	5611-1302(O)or(R)	XISTOR, PNP R
742	Q445	5611-970(BL)	XISTOR, PNP R
742	Q446	5611-970(BL)	XISTOR, PNP R
		DIODES	
869	⚠D1	5685-D5FB20F1	SILICON, BRIG
869	⚠D2	5685-D5FB20F1	SILICON, BRIG
838	D3	5636-1S2471	DIODE, SWITCH
837	D4	5635-HZ6A-2L	DIODE, ZENER
839	D5	5631-1S2473	DIODE, DET
762	D401	5631-1S2473	DIODE, DET
762	D402	5631-1S2473	DIODE, DET
763	D403	5635-HZ15-1L	DIODE, ZENER
763	D404	5635-HZ15-1L	DIODE, ZENER
764	D405	5632-10DF2	DIODE, RECT
764	D406	5632-10DF2	DIODE, RECT
764	D407	5632-10DF2	DIODE, RECT
764	D408	5632-10DF2	DIODE, RECT
761	D409	5641-MV12YM	VARISTOR
761	D410	5641-MV12YM	VARISTOR
		COILS	
768	L1	5597-35502	CORE, BEADS
768	L2	5597-35502	CORE, BEADS
768	L3	5597-35502	CORE, BEADS
768	L4	5597-35502	CORE, BEADS
767	L5	5991-7165	SPRING COIL
767	L6	5991-7165	SPRING COIL
		CONTROLS	
791	VR401	5101-50371920	RES, SEMI FIX 50K
791	VR402	5101-50371920	RES, SEMI FIX 50K
792	VR403	5101-30171920	RES, SEMI FIX 300
792	VR404	5101-30171920	RES, SEMI FIX 300
		MISCELLANEOUS	
826	LCN511	4163-0115024	CONNECTOR W/W
827	LCN512	4163-0120025	CONNECTOR W/W
828	LCN513	4163-0137026	CONNECTOR W/W
829	LCN514	4163-0143027	CONNECTOR W/W
825	LCN515	4163-0111024	CONNECTOR W/W
825	LCN516	4163-0111024	CONNECTOR W/W
943	CN103	4443-040185	CONNECTOR
982	JL402	4242-R0203351	JUMPER LEAD
948	TM101	4214-11021	TERMINAL
949	TM102	4214-11031	TERMINAL
950	TM103	4214-11013	TERMINAL
950	TM107	4214-11013	TERMINAL
		PCB-2 HEADPHONE P.C.BOARD	
916	J1	4451-00159	JACK, IP
		PCB-3 FUSE P.C.BOARD	
		CAPACITORS	
863	⚠C1	5352-1030959	CAP, MTL .01μ (UA) (BK)
863B	⚠C1	5352-1030958	CAP, MTL .01μ (G) (GB)
863D	⚠C1	5352-1030961	CAP, MTL .01μ (N)
876	C51	5345-107G0962	CAP, MINI ELE 100μ/63V
877	C52	5345-107C041	CAP, MINI ELE 100μ/16V
		RESISTORS	
042B	⚠R1	5135-335J50P	RES, CBN 1/2P 3.3M (G) (GB)
879	R51	5173-102571	RES, MTL 2 1K
881	R53	5134-562J25P	RES, CBN 1/4P 5.6K
880	R54	5135-181J50P	RES, CBN 1/2P 180
		DIODES	
873	D6	5632-DS135E	DIODE, RECT
873	D7	5632-DS135E	DIODE, RECT

ELECTRICAL PARTS LIST

Ser. No.	Ref. No.	Part No.	Description
		PCB-1 MAIN P.C.BOARD	
		CAPACITORS	
864	C2	5352-1041957	CAP, MTL .1μ
864	C3	5352-1041957	CAP, MTL .1μ
864	C4	5352-1041957	CAP, MTL .1μ
864	C5	5352-1041957	CAP, MTL .1μ
870	⚠C6	5341-002GM688	CAP, ELE 6800μ/63V
870	⚠C7	5341-002GM688	CAP, ELE 6800μ/63V
870	⚠C8	5341-002GM688	CAP, ELE 6800μ/63V
870	⚠C9	5341-002GM688	CAP, ELE 6800μ/63V
841	C10	5345-475F0952	CAP, MINI ELE 4.7μ/50V
842	C11	5345-336B0952	CAP, MINI ELE 33μ/10V
843	C12	5354-334593	CAP, MYL .33μ
843	C13	5354-334593	CAP, MYL .33μ
846	C15	5353-330534	CAP, MCA 33p
845	C25	5354-683JIHM	CAP, MYL .068μ
845	C26	5354-683JIHM	CAP, MYL .068μ
844	C31	5354-104593	CAP, MYL .1μ
844	C32	5354-104593	CAP, MYL .1μ
062B	C60	5352-1040962	CAP, MTL .1μ (G) (GB)
771	C401	5345-107B0951	CAP, MINI ELE 100μ/10V
771	C402	5345-107B0951	CAP, MINI ELE 100μ/10V
776	C403	5353-271534	CAP, MCA 270p
776	C404	5353-271534	CAP, MCA 270p
773	C405	5345-476D041	CAP, MINI ELE 47μ/25V
773	C406	5345-476D041	CAP, MINI ELE 47μ/25V
780	C407	5353-020934	CAP, MCA 2p
780	C408	5353-020934	CAP, MCA 2p
781	C409	5353-680534	CAP, MCA 68p
781	C410	5353-680534	CAP, MCA 68p
772	C411	5345-106C041	CAP, MINI ELE 10μ/16V
772	C412	5345-106C041	CAP, MINI ELE 10μ/16V
774	C413	5345-337G0962	CAP, MINI ELE 330μ/63V
774	C414	5345-337G0962	CAP, MINI ELE 330μ/63V
774	C415	5345-337G0962	CAP, MINI ELE 330μ/63V
774	C416	5345-337G0962	CAP, MINI ELE 330μ/63V
772	C417	5345-106C041	CAP, MINI ELE 10μ/16V
772	C418	5345-106C041	CAP, MINI ELE 10μ/16V
778	C419	5354-683JIHM	CAP, MYL .068μ
778	C420	5354-683JIHM	CAP, MYL .068μ
778	C421	5354-683JIHM	CAP, MYL .068μ
778	C422	5354-683JIHM	CAP, MYL .068μ
		RESISTORS	
851	R2	5134-103J25P	RES, CBN 1/4P 10K
858	R3	5134-472J25P	RES, CBN 1/4P 4.7K
855	R4	5134-473J25P	RES, CBN 1/4P 47K
854	R5	5134-334J25P	RES, CBN 1/4P 330K
852	R6	5134-684J25P	RES, CBN 1/4P 680K
857	R7	5134-184J25P	RES, CBN 1/4P 180K
853	R8	5134-225J25P	RES, CBN 1/4P 2.2M
850	R9	5134-104J25P	RES, CBN 1/4P 100K
850	R10	5134-104J25P	RES, CBN 1/4P 100K
851	R11	5134-103J25P	RES, CBN 1/4P 10K
850	R12	5134-104J25P	RES, CBN 1/4P 100K
855	R13	5134-473J25P	RES, CBN 1/4P 47K
856	R14	5134-223J25P	RES, CBN 1/4P 22K
856	R15	5134-223J25P	RES, CBN 1/4P 22K
855	R16	5134-473J25P	RES, CBN 1/4P 47K
851	R17	5134-103J25P	RES, CBN 1/4P 10K
856	R18	5134-223J25P	RES, CBN 1/4P 22K
850	R25	5134-104J25P	RES, CBN 1/4P 100K
855	R26	5134-473J25P	RES, CBN 1/4P 47K
858	R27	5134-472J25P	RES, CBN 1/4P 4.7K
858	R28	5134-472J25P	RES, CBN 1/4P 4.7K
858	R29	5134-472J25P	RES, CBN 1/4P 4.7K
858	R30	5134-472J25P	RES, CBN 1/4P 4.7K
858	R31	5134-472J25P	RES, CBN 1/4P 4.7K
858	R32	5134-472J25P	RES, CBN 1/4P 4.7K
856	R33	5134-223J25P	RES, CBN 1/4P 22K
856	R34	5134-223J25P	RES, CBN 1/4P 22K
847	R35	5134-332J25P	RES, CBN 1/4P 3.3K
847	R36	5134-332J25P	RES, CBN 1/4P 3.3K
849	R37	5134-105J25P	RES, CBN 1/4P 1M
849	R38	5134-105J25P	RES, CBN 1/4P 1M
848	R39	5134-332J25P	RES, CBN 1/4P 3.3K
856	R41	5134-223J25P	RES, CBN 1/4P 22K
856	R42	5134-223J25P	RES, CBN 1/4P 22K
856	R45	5134-223J25P	RES, CBN 1/4P 22K
856	R46	5134-223J25P	RES, CBN 1/4P 22K
808	R401	5134-102J25P	RES, CBN 1/4P 1K
808	R402	5134-102J25P	RES, CBN 1/4P 1K
809	R403	5134-223J25P	RES, CBN 1/4P 22K
809	R404	5134-223J25P	RES, CBN 1/4P 22K
810	R405	5134-683J25P	RES, CBN 1/4P 68K
810	R406	5134-683J25P	RES, CBN 1/4P 68K
811	R407	5134-122J25P	RES, CBN 1/4P 1.2K
811	R408	5134-122J25P	RES, CBN 1/4P 1.2K
811	R409	5134-122J25P	RES, CBN 1/4P 1.2K
811	R410	5134-122J25P	RES, CBN 1/4P 1.2K
812	R411	5134-181J25P	RES, CBN 1/4P 180
812	R412	5134-181J25P	RES, CBN 1/4P 180
812	R413	5134-181J25P	RES, CBN 1/4P 180
812	R414	5134-181J25P	RES, CBN 1/4P 180
813	R415	5134-562J25P	RES, CBN 1/4P 5.6K
813	R416	5134-562J25P	RES, CBN 1/4P 5.6K
814	R417	5134-331J25P	RES, CBN 1/4P 330
814	R418	5134-331J25P	RES, CBN 1/4P 330
815	R419	5134-393J25P	RES, CBN 1/4P 39K
815	R420	5134-393J25P	RES, CBN 1/4P 39K
816	R421	5134-473J25P	RES, CBN 1/4P 47K
816	R422	5134-473J25P	RES, CBN 1/4P 47K
802	R423	5174-471381	RES, MTL 1/4 470
802	R424	5174-471381	RES, MTL 1/4 470
801	R425	5174-220381	RES, MTL 1/4 22
801	R426	5174-220381	RES, MTL 1/4 22
797	⚠R427	5102-5614713	RES, FUSE 560
797	⚠R428	5102-5614713	RES, FUSE 560
797	⚠R429	5102-5614713	RES, FUSE 560
797	⚠R430	5102-5614713	RES, FUSE 560
813	R431	5134-562J25P	RES, CBN 1/4P 5.6K
813	R432	5134-562J25P	RES, CBN 1/4P 5.6K
803	R433	5174-243381	RES, MTL 1/4 24K
803	R434	5174-243381	RES, MTL 1/4 24K
818	R435	5134-123J25P	RES, CBN 1/4P 12K
818	R436	5134-123J25P	RES, CBN 1/4P 12K
818	R437	5134-123J25P	RES, CBN 1/4P 12K
818	R438	5134-123J25P	RES, CBN 1/4P 12K
817	R439	5134-222J25P	RES, CBN 1/4P 2.2K
817	R440	5134-222J25P	RES, CBN 1/4P 2.2K
817	R441	5134-222J25P	RES, CBN 1/4P 2.2K
817	R442	5134-222J25P	RES, CBN 1/4P 2.2K
795	⚠R443	5102-1514713	RES, FUSE 150
795	⚠R444	5102-1514713	RES, FUSE 150
795	⚠R445	5102-1514713	RES, FUSE 150
795	⚠R446	5102-1514713	RES, FUSE 150
804	R447	5174-123381	RES, MTL 1/4 12K
804	R448	5174-123381	RES, MTL 1/4 12K
804	R449	5174-123381	RES, MTL 1/4 12K
804	R450	5174-123381	RES, MTL 1/4 12K
795	⚠R451	5102-1514713	RES, FUSE 150
795	⚠R452	5102-1514713	RES, FUSE 150
795	⚠R453	5102-1514713	RES, FUSE 150
795	⚠R454	5102-1514713	RES, FUSE 150
819	R455	5134-561J25P	RES, CBN 1/4P 560
819	R456	5134-561J25P	RES, CBN 1/4P 560
820	R457	5134-471J25P	RES, CBN 1/4P 470
820	R458	5134-471J25P	RES, CBN 1/4P 470
807	R459	5134-131J25P	RES, CBN 1/4P 130
807	R460	5134-131J25P	RES, CBN 1/4P 130
794	⚠R461	5102-2205711	RES, FUSE 22
794	⚠R462	5102-2205711	RES, FUSE 22
794	⚠R463	5102-2205711	RES, FUSE 22
794	⚠R464	5102-2205711	RES, FUSE 22
796	⚠R465	5102-1014713	RES, FUSE 100

Ser. No.	Ref. No.	Part No.	Description
796	⚠R466	5102-1014713	RES, FUSE 100
796	⚠R467	5102-1014713	RES, FUSE 100
796	⚠R468	5102-1014713	RES, FUSE 100
798	⚠R469	5102-2R2579	RES, FUSE 2.2
798	⚠R470	5102-2R2579	RES, FUSE 2.2
798	⚠R471	5102-2R2579	RES, FUSE 2.2
798	⚠R472	5102-2R2579	RES, FUSE 2.2
821	R473	5134-150J25P	RES, CBN 1/4P 15
821	R474	5134-150J25P	RES, CBN 1/4P 15
821	R475	5134-150J25P	RES, CBN 1/4P 15
821	R476	5134-150J25P	RES, CBN 1/4P 15
822	R477	5134-100J25P	RES, CBN 1/4P 10
822	R478	5134-100J25P	RES, CBN 1/4P 10
822	R479	5134-100J25P	RES, CBN 1/4P 10
822	R480	5134-100J25P	RES, CBN 1/4P 10
823	⚠R481	5102-6804713	RES, FUSE 68
823	⚠R482	5102-6804713	RES, FUSE 68
785	R483	5275-R27671	RES, CEM 5P .27
785	R484	5275-R27671	RES, CEM 5P .27
785	R485	5275-R27671	RES, CEM 5P .27
785	R486	5275-R27671	RES, CEM 5P .27
786	R487	5175-150571	RES, MTL 3 15
786	R488	5175-150571	RES, MTL 3 15
787	R489	5171-220572	RES, MTL 1 22
787	R490	5171-220572	RES, MTL 1 22
806	R495	5134-223J25P	RES, CBN 1/4P 22K
806	R496	5134-223J25P	RES, CBN 1/4P 22K
		TRANSISTORS	
831	Q1	5613-2603(E)or(F)	XISTOR, NPN R
832	Q2	5611-1115(E)or(F)	XISTOR, PNP R
831	Q3	5613-2603(E)or(F)	XISTOR, NPN R
832	Q4	5611-1115(E)or(F)	XISTOR, PNP R
832	Q7	5611-1115(E)or(F)	XISTOR, PNP R
833	Q8	5613-1845(E)or(F)	XISTOR, NPN R
834	Q9	5611-970(BL)	XISTOR, PNP R
834	Q10	5611-970(BL)	XISTOR, PNP R
835	Q401	5616-2SK364(V)or(BL)	FET, N-CH
835	Q402	5616-2SK364(V)or(BL)	FET, N-CH
741	Q403	5613-2240(BL)	XISTOR, NPN R
741	Q404	5613-2240(BL)	XISTOR, NPN R
741	Q405	5613-2240(BL)	XISTOR, NPN R
741	Q406	5613-2240(BL)	XISTOR, NPN R
745	Q407	5613-2603(F)or(E)	XISTOR, NPN R
745	Q408	5613-2603(F)or(E)	XISTOR, NPN R
745	Q409	5613-2603(F)or(E)	XISTOR, NPN R
745	Q410	5613-2603(F)or(E)	XISTOR, NPN R
747	Q411	5611-1145(O)or(Y)	XISTOR, PNP R
747	Q412	5611-1145(O)or(Y)	XISTOR, PNP R
744	Q413	5613-2240(BL)	XISTOR, NPN R
744	Q414	5613-2240(BL)	XISTOR, NPN R
742	Q415	5611-970(BL)	XISTOR, PNP R
742	Q416	5611-970(BL)	XISTOR, PNP R
743	Q417	5611-992(E)	XISTOR, PNP R
743	Q418	5611-992(E)	XISTOR, PNP R
744	Q419	5613-2240(BL)	XISTOR, NPN R
744	Q420	5613-2240(BL)	XISTOR, NPN R
765	Q421	5611-1285(F)	XISTOR, PNP R
765	Q422	5611-1285(F)	XISTOR, PNP R
746	Q423	5613-3245(F)	XISTOR, NPN R
746	Q424	5613-3245(F)	XISTOR, NPN R
765	Q425	5611-1285(F)	XISTOR, PNP R
765	Q426	5611-1285(F)	XISTOR, PNP R
746	Q427	5613-3245(F)	XISTOR, NPN R
746	Q428	5613-3245(F)	XISTOR, NPN R
750	Q429	5613-945(P)	XISTOR, NPN R
750	Q430	5613-945(P)	XISTOR, NPN R
748	Q433	5613-2235(Y)	XISTOR, NPN R
748	Q434	5613-2235(Y)	XISTOR, NPN R
749	Q435	5611-965(Y)	XISTOR, PNP R
749	Q436	5611-965(Y)	XISTOR, PNP R
754	Q437	5611-1111(Q)or(R)	XISTOR, PNP R
754	Q438	5611-1111(Q)or(R)	XISTOR, PNP R
751	Q439	5613-2591(Q)or(R)	XISTOR, NPN R
751	Q440	5613-2591(Q)or(R)	XISTOR, NPN R
757	Q441	5613-3281(O)or(R)	XISTOR, NPN R
757	Q442	5613-3281(O)or(R)	XISTOR, NPN R
759	Q443	5611-1302(O)or(R)	XISTOR, PNP R
759	Q444	5611-1302(O)or(R)	XISTOR, PNP R
742	Q445	5611-970(BL)	XISTOR, PNP R
742	Q446	5611-970(BL)	XISTOR, PNP R
		DIODES	
869	⚠D1	5685-D5FB20F1	SILICON, BRIG
869	⚠D2	5685-D5FB20F1	SILICON, BRIG
838	D3	5636-1S2471	DIODE, SWITCH
837	D4	5635-HZ6A-2L	DIODE, ZENER
839	D5	5631-1S2473	DIODE, DET
762	D401	5631-1S2473	DIODE, DET
762	D402	5631-1S2473	DIODE, DET
763	D403	5635-HZ15-1L	DIODE, ZENER
763	D404	5635-HZ15-1L	DIODE, ZENER
764	D405	5632-10DF2	DIODE, RECT
764	D406	5632-10DF2	DIODE, RECT
764	D407	5632-10DF2	DIODE, RECT
764	D408	5632-10DF2	DIODE, RECT
761	D409	5641-MV12YM	VARISTOR
761	D410	5641-MV12YM	VARISTOR
		COILS	
768	L1	5597-35502	CORE, BEADS
768	L2	5597-35502	CORE, BEADS
768	L3	5597-35502	CORE, BEADS
768	L4	5597-35502	CORE, BEADS
767	L5	5991-7165	SPRING COIL
767	L6	5991-7165	SPRING COIL
		CONTROLS	
791	VR401	5101-50371920	RES, SEMI FIX 50K
791	VR402	5101-50371920	RES, SEMI FIX 50K
792	VR403	5101-30171920	RES, SEMI FIX 300
792	VR404	5101-30171920	RES, SEMI FIX 300
		MISCELLANEOUS	
826	LCN511	4163-0115024	CONNECTOR W/W
827	LCN512	4163-0120025	CONNECTOR W/W
828	LCN513	4163-0137026	CONNECTOR W/W
829	LCN514	4163-0143027	CONNECTOR W/W
825	LCN515	4163-0111024	CONNECTOR W/W
825	LCN516	4163-0111024	CONNECTOR W/W
943	CN103	4443-040185	CONNECTOR
982	JL402	4242-R0203351	JUMPER LEAD
948	TM101	4214-11021	TERMINAL
949	TM102	4214-11031	TERMINAL
950	TM103	4214-11013	TERMINAL
950	TM107	4214-11013	TERMINAL

PCB-2 HEADPHONE P.C.BOARD

916	J1	4451-00159	JACK, IP

PCB-3 FUSE P.C.BOARD

		CAPACITORS	
863	⚠C1	5352-1030959	CAP, MTL .01μ (UA) (BK)
863B	⚠C1	5352-1030958	CAP, MTL .01μ (G) (GB)
863D	⚠C1	5352-1030961	CAP, MTL .01μ (N)
876	C51	5345-107G0962	CAP, MINI ELE 100μ/63V
877	C52	5345-107C041	CAP, MINI ELE 100μ/16V
		RESISTORS	
042B	⚠R1	5135-335J50P	RES, CBN 1/2P 3.3M (G) (GB)
879	R51	5173-102571	RES, MTL 2 1K
881	R53	5134-562J25P	RES, CBN 1/4P 5.6K
880	R54	5135-181J50P	RES, CBN 1/2P 180
		DIODES	
873	D6	5632-DS135E	DIODE, RECT
873	D7	5632-DS135E	DIODE, RECT

Ser. No.	Ref. No.	Part No.	Description
874	D8	5635-HZ6A-2L	DIODE, ZENER
		MISCELLANEOUS	
945	CN202	4443-030185	CONNECTOR
868	⚠HL1	4472-7113	HOLDER, FUSE UA BK N
868B	⚠HL1	4472-7122	HOLDER, FUSE G GB
868	⚠HL2	4472-7113	HOLDER, FUSE UA BK N
868B	⚠HL2	4472-7122	HOLDER, FUSE G GB
868	⚠HL3	4472-7113	HOLDER, FUSE
868	⚠HL4	4472-7113	HOLDER, FUSE
868	⚠HL5	4472-7113	HOLDER, FUSE
868	⚠HL6	4472-7113	HOLDER, FUSE
868	⚠HL7	4472-7113	HOLDER, FUSE
868	⚠HL8	4472-7113	HOLDER, FUSE
868	⚠HL9	4472-7113	HOLDER, FUSE
868	⚠HL10	4472-7113	HOLDER, FUSE
891	SW8	4431-01018158	SWITCH, PUSH
928	TM202	4214-122	TERMINAL UA BK N
928B	TM202	4214-122	TERMINAL G GB
928	TM203	4214-122	TERMINAL UA BK N
928B	TM203	4214-122	TERMINAL G GB
928	TM204	4214-122	TERMINAL

PCB-4 SPEAKER P.C.BOARD

		RESISTORS	
789	R493	5171-471572	RES, MTL 1 470
789	R494	5171-471572	RES, MTL 1 470
		MISCELLANEOUS	
927	TM901	4214-156	TERMINAL

PCB-5 TONE 1 P.C.BOARD

		CAPACITORS	
729	C17	5345-337D041	CAP, MINI ELE 330μ/25V
729	C18	5345-337D041	CAP, MINI ELE 330μ/25V
730	C21	5345-227D041	CAP, MINI ELE 220μ/25V
730	C22	5345-227D041	CAP, MINI ELE 220μ/25V
731	C61	5345-107C041	CAP, MINI ELE 100μ/16V
731	C62	5345-107C041	CAP, MINI ELE 100μ/16V
730	C63	5345-227D041	CAP, MINI ELE 220μ/25V
730	C64	5345-227D041	CAP, MINI ELE 220μ/25V
664	C501	5359-101585I	CAP, PPP 100p
664	C502	5359-101585I	CAP, PPP 100p
660	C507	5345-106C095I	CAP, MINI ELE 10μ/16V
660	C508	5345-106C095I	CAP, MINI ELE 10μ/16V
667	C511	5353-010934	CAP, MCA 1p
667	C512	5353-010934	CAP, MCA 1p
661	C513	5345-226D095I	CAP, MINI ELE 22μ/25V
661	C514	5345-226D095I	CAP, MINI ELE 22μ/25V
668	C515	5353-680534	CAP, MCA 68p
668	C516	5353-680534	CAP, MCA 68p
668	C517	5353-680534	CAP, MCA 68p
668	C518	5353-680534	CAP, MCA 68p
662	C519	5345-476C095I	CAP, MINI ELE 47μ/16V
662	C520	5345-476C095I	CAP, MINI ELE 47μ/16V
674	C533	5354-104593	CAP, MYL .1μ
674	C534	5354-104593	CAP, MYL .1μ
659	C543	5345-227D041	CAP, MINI ELE 220μ/25V
659	C544	5345-227D041	CAP, MINI ELE 220μ/25V
625	C901	5345-104F095I	CAP, MINI ELE .1μ/50V
625	C902	5345-104F095I	CAP, MINI ELE .1μ/50V
629	C903	5354-154593	CAP, MYL .15μ
629	C904	5354-154593	CAP, MYL .15μ
627	C905	5345-107D045	CAP, MINI ELE 100μ/25V
627	C906	5345-107D045	CAP, MINI ELE 100μ/25V
630	C907	5354-334593	CAP, MYL .33μ
630	C908	5354-334593	CAP, MYL .33μ
626	C909	5345-224F095I	CAP, MINI ELE .22μ/50V
626	C910	5345-224F095I	CAP, MINI ELE .22μ/50V
624	C911	5345-227D041	CAP, MINI ELE 220μ/25V
624	C912	5345-227D041	CAP, MINI ELE 220μ/25V
		RESISTORS	
736	R43	5134-822J25P	RES, CBN 1/4P 8.2K
736	R44	5134-822J25P	RES, CBN 1/4P 8.2K
732	⚠R47	5102-1014715	RES, FUSE 100
732	⚠R48	5102-1014715	RES, FUSE 100
734	R49	5176-S010J151	RES, MTL 1/2 150
734	R50	5176-S010J151	RES, MTL 1/2 150
734	R52	5176-S010J151	RES, MTL 1/2 150
940	R56	5134-681J25P	RES, CBN 1/4P 680
734	R57	5176-S010J151	RES, MTL 1/2 150
734	R58	5176-S010J151	RES, MTL 1/2 150
734	R59	5176-S010J151	RES, MTL 1/2 150
733	⚠R61	5102-3914715	RES, FUSE 390
733	⚠R62	5102-3914715	RES, FUSE 390
735	R63	5176-S010J561	RES, MTL 1/2 560
735	R64	5176-S010J561	RES, MTL 1/2 560
735	R65	5176-S010J561	RES, MTL 1/2 560
735	R66	5176-S010J561	RES, MTL 1/2 560
737	R69	5134-103J25P	RES, CBN 1/4P 10K
737	R70	5134-103J25P	RES, CBN 1/4P 10K
738	⚠R91	5102-1014713	RES, FUSE 100
738	⚠R92	5102-1014713	RES, FUSE 100
681	R501	5134-102J25P	RES, CBN 1/4P 1K
681	R502	5134-102J25P	RES, CBN 1/4P 1K
683	R505	5134-224J25P	RES, CBN 1/4P 220K
683	R506	5134-224J25P	RES, CBN 1/4P 220K
682	R507	5134-394J25P	RES, CBN 1/4P 390K
682	R508	5134-394J25P	RES, CBN 1/4P 390K
700	R511	5134-331J25P	RES, CBN 1/4P 330
700	R512	5134-331J25P	RES, CBN 1/4P 330
684	R519	5134-473J25P	RES, CBN 1/4P 47K
684	R520	5134-473J25P	RES, CBN 1/4P 47K
685	R521	5134-332J25P	RES, CBN 1/4P 3.3K
685	R522	5134-332J25P	RES, CBN 1/4P 3.3K
685	R523	5134-332J25P	RES, CBN 1/4P 3.3K
685	R524	5134-332J25P	RES, CBN 1/4P 3.3K
686	R525	5134-471J25P	RES, CBN 1/4P 470
686	R526	5134-471J25P	RES, CBN 1/4P 470
686	R527	5134-471J25P	RES, CBN 1/4P 470
686	R528	5134-471J25P	RES, CBN 1/4P 470
687	R529	5134-331J25P	RES, CBN 1/4P 330
687	R530	5134-331J25P	RES, CBN 1/4P 330
688	R531	5134-222J25P	RES, CBN 1/4P 2.2K
688	R532	5134-222J25P	RES, CBN 1/4P 2.2K
688	R533	5134-222J25P	RES, CBN 1/4P 2.2K
688	R534	5134-222J25P	RES, CBN 1/4P 2.2K
689	R535	5134-274J25P	RES, CBN 1/4P 270K
689	R536	5134-274J25P	RES, CBN 1/4P 270K
690	R537	5134-153J25P	RES, CBN 1/4P 15K
690	R538	5134-153J25P	RES, CBN 1/4P 15K
687	R539	5134-331J25P	RES, CBN 1/4P 330
687	R540	5134-331J25P	RES, CBN 1/4P 330
687	R541	5134-331J25P	RES, CBN 1/4P 330
687	R542	5134-331J25P	RES, CBN 1/4P 330
691	R553	5134-121J25P	RES, CBN 1/4P 120
691	R554	5134-121J25P	RES, CBN 1/4P 120
684	R555	5134-473J25P	RES, CBN 1/4P 47K
684	R556	5134-473J25P	RES, CBN 1/4P 47K
688	R561	5134-222J25P	RES, CBN 1/4P 2.2K
688	R562	5134-222J25P	RES, CBN 1/4P 2.2K
641	R901	5134-102J25P	RES, CBN 1/4P 1K
641	R902	5134-102J25P	RES, CBN 1/4P 1K
632	R903	5134-684J25P	RES, CBN 1/4P 680K
632	R904	5134-684J25P	RES, CBN 1/4P 680K
633	R905	5134-224J25P	RES, CBN 1/4P 220K
633	R906	5134-224J25P	RES, CBN 1/4P 220K
634	R907	5134-332J25P	RES, CBN 1/4P 3.3K
634	R908	5134-332J25P	RES, CBN 1/4P 3.3K
634	R909	5134-332J25P	RES, CBN 1/4P 3.3K
634	R910	5134-332J25P	RES, CBN 1/4P 3.3K
635	R911	5134-183J25P	RES, CBN 1/4P 18K
635	R912	5134-183J25P	RES, CBN 1/4P 18K

Ser. No.	Ref. No.	Part No.	Description
636	R913	5134-472J25P	RES, CBN 1/4P 4.7K
636	R914	5134-472J25P	RES, CBN 1/4P 4.7K
638	R915	5134-562J25P	RES, CBN 1/4P 5.6K
638	R916	5134-562J25P	RES, CBN 1/4P 5.6K
634	R917	5134-332J25P	RES, CBN 1/4P 3.3K
634	R918	5134-332J25P	RES, CBN 1/4P 3.3K
635	R919	5134-183J25P	RES, CBN 1/4P 18K
635	R920	5134-183J25P	RES, CBN 1/4P 18K
637	R921	5134-331J25P	RES, CBN 1/4P 330
637	R922	5134-331J25P	RES, CBN 1/4P 330
634	R923	5134-332J25P	RES, CBN 1/4P 3.3K
634	R924	5134-332J25P	RES, CBN 1/4P 3.3K
639	R925	5134-221J25P	RES, CBN 1/4P 220
639	R926	5134-221J25P	RES, CBN 1/4P 220
637	R927	5134-331J25P	RES, CBN 1/4P 330
637	R928	5134-331J25P	RES, CBN 1/4P 330
640	R929	5134-104J25P	RES, CBN 1/4P 100K
640	R930	5134-104J25P	RES, CBN 1/4P 100K
		TRANSISTORS	
721	Q5	5613-3422(O)or(Y)	XISTOR, NPN R
722	Q6	5611-1359(O)or(Y)	XISTOR, PNP R
723	Q11	5613-2235(O)or(Y)	XISTOR, NPN R
724	Q12	5611-965(O)or(Y)	XISTOR, PNP R
651	Q501	5613-2320L(F)	XISTOR, NPN R
651	Q502	5613-2320L(F)	XISTOR, NPN R
651	Q503	5613-2320L(F)	XISTOR, NPN R
651	Q504	5613-2320L(F)	XISTOR, NPN R
652	Q505	5613-2603(E)or(F)	XISTOR, NPN R
652	Q506	5613-2603(E)or(F)	XISTOR, NPN R
652	Q507	5613-2603(E)or(F)	XISTOR, NPN R
652	Q508	5613-2603(E)or(F)	XISTOR, NPN R
653	Q509	5611-1115(E)or(F)	XISTOR, PNP R
653	Q510	5611-1115(E)or(F)	XISTOR, PNP R
652	Q511	5613-2603(E)or(F)	XISTOR, NPN R
652	Q512	5613-2603(E)or(F)	XISTOR, NPN R
653	Q513	5611-1115(E)or(F)	XISTOR, PNP R
653	Q514	5611-1115(E)or(F)	XISTOR, PNP R
655	Q515	5612-647(C)	XISTOR, PNP A
655	Q516	5612-647(C)	XISTOR, PNP A
654	Q517	5614-667(C)	XISTOR, NPN A
654	Q518	5614-667(C)	XISTOR, NPN A
621	Q901	5613-2603(F)or(E)	XISTOR, NPN R
621	Q902	5613-2603(F)or(E)	XISTOR, NPN R
622	Q903	5611-1115(F)or(E)	XISTOR, PNP R
622	Q904	5611-1115(F)or(E)	XISTOR, PNP R
621	Q905	5613-2603(F)or(E)	XISTOR, NPN R
621	Q906	5613-2603(F)or(E)	XISTOR, NPN R
		DIODES	
726	D9	5635-HZ24-2L	DIODE, ZENER
726	D10	5635-HZ24-2L	DIODE, ZENER
727	D11	5635-HZ15-2L	DIODE, ZENER
727	D12	5635-HZ15-2L	DIODE, ZENER
657	D503	5631-1S2473	DIODE, DET
657	D504	5631-1S2473	DIODE, DET
		CONTROLS	
913	VR501	5113-50396122	RES, V CBN 16 50K
913	VR502	5113-50396122	RES, V CBN 16 50K
909	VR505	5113-50373148	RES, V CBN 16 50K
909	VR506	5113-50373148	RES, V CBN 16 50K
911	VR507	5113-10474148	RES, V CBN 16 100K
911	VR508	5113-10474148	RES, V CBN 16 100K
		MISCELLANEOUS	
969	JL501	4242-R0403201	JUMPER LEAD
970	JL502	4242-R0307800	JUMPER LEAD
971	JL503	4242-R0407181	JUMPER LEAD
972	JL504	4242-R0307551	JUMPER LEAD
973	JL505	4242-R0305800	JUMPER LEAD
974	JL506	4242-R0307551	JUMPER LEAD
975	JL507	4242-R0303141	JUMPER LEAD
970	JL508	4242-R0307800	JUMPER LEAD
970	JL509	4242-R0307800	JUMPER LEAD
970	JL510	4242-R0307800	JUMPER LEAD
970	JL511	4242-R0307800	JUMPER LEAD
976	JL515	4242-R0303501	JUMPER LEAD
978	JL516	4242-R0403101	JUMPER LEAD
979	JL517	4242-R0404181	JUMPER LEAD
981	JL801	4242-R0304601	JUMPER LEAD
980	JL802	4242-R0304551	JUMPER LEAD
897	SW1	4424-00102045	SWITCH, RO-SL
898	SW2	4424-00103065	SWITCH, RO-SL
899	SW3	4424-00101043	SWITCH, RO-SL
708	LCN519	4163-0125020	CONNECTOR W/W
709	LCN528	4163-0125024	CONNECTOR W/W

PCB-6 TONE 2 P.C.BOARD

		CAPACITORS	
933	C75	5345-106C0951	CAP, MINI ELE 10μ/16V
933	C76	5345-106C0951	CAP, MINI ELE 10μ/16V
643	C503	5354-394593	CAP, MYL .39μ
643	C504	5354-394593	CAP, MYL .39μ
644	C505	5354-183JIHM	CAP, MYL .018μ
644	C506	5354-183JIHM	CAP, MYL .018μ
679	C523	5354-183JIHM	CAP, MYL .018μ
679	C524	5354-183JIHM	CAP, MYL .018μ
675	C525	5354-152JIHM	CAP, MYL 1500p
675	C526	5354-152JIHM	CAP, MYL 1500p
672	C527	5354-183JIHM	CAP, MYL .018μ
672	C528	5354-183JIHM	CAP, MYL .018μ
673	C529	5354-152JIHM	CAP, MYL 1500p
673	C530	5354-152JIHM	CAP, MYL 1500p
671	C531	5354-104593	CAP, MYL .1μ
671	C532	5354-104593	CAP, MYL .1μ
677	C535	5354-682JIHM	CAP, MYL 6800p
677	C536	5354-682JIHM	CAP, MYL 6800p
678	C537	5354-393JIHM	CAP, MYL .039μ
678	C538	5354-393JIHM	CAP, MYL .039μ
665	C539	5354-272JIHM	CAP, MYL 2700p
665	C540	5354-272JIHM	CAP, MYL 2700p
679	C541	5354-183JIHM	CAP, MYL .018μ
679	C542	5354-183JIHM	CAP, MYL .018μ
059B	C554	5361-223ZF	CAP, CER .022μ G GB
		RESISTORS	
938	R55	5134-681J25P	RES, CBN 1/4P 680
646	R503	5134-105J25P	RES, CBN 1/4P 1M
646	R504	5134-105J25P	RES, CBN 1/4P 1M
702	R543	5134-331J25P	RES, CBN 1/4P 330
702	R544	5134-331J25P	RES, CBN 1/4P 330
697	R545	5134-153J25P	RES, CBN 1/4P 15K
697	R546	5134-153J25P	RES, CBN 1/4P 15K
692	R547	5134-272J25P	RES, CBN 1/4P 2.7K
692	R548	5134-272J25P	RES, CBN 1/4P 2.7K
696	R549	5134-331J25P	RES, CBN 1/4P 330
696	R550	5134-331J25P	RES, CBN 1/4P 330
699	R551	5134-122J25P	RES, CBN 1/4P 1.2K
699	R552	5134-122J25P	RES, CBN 1/4P 1.2K
697	R557	5134-153J25P	RES, CBN 1/4P 15K
697	R558	5134-153J25P	RES, CBN 1/4P 15K
698	R559	5134-272J25P	RES, CBN 1/4P 2.7K
698	R560	5134-272J25P	RES, CBN 1/4P 2.7K
701	R589	5134-391J25P	RES, CBN 1/4P 390
701	R590	5134-391J25P	RES, CBN 1/4P 390
		DIODES	
936	D52	5637-GL5HD10	LED
936	D53	5637-GL5HD10	LED
936	D54	5637-GL5HD10	LED
936	D55	5637-GL5HD10	LED
936	D56	5637-GL5HD10	LED
936	D57	5637-GL5HD10	LED
936	D58	5637-GL5HD10	LED
		MISCELLANEOUS	
893	SW5	4431-03127158	SWITCH, PUSH
892	SW7	4431-05127159	SWITCH, PUSH

Ser. No.	Ref. No.	Part No.	Description
983	JL514	4242-R0403101	JUMPER LEAD

PCB-7 VOLUME P.C.BOARD

RESISTORS

703	R509	5134-472J25P	RES, CBN 1/4P 4.7K
703	R510	5134-472J25P	RES, CBN 1/4P 4.7K

CONTROLS

907	VR503	5113-10472147	RES, V CBN 16 100K
907	VR504	5113-10472147	RES, V CBN 16 100K

MISCELLANEOUS

942	CN514	4443-030185	CONNECTOR

PCB-8 CAPACITANCE TRIM P.C.BOARD

CAPACITORS

558	C653	5359-1515851	CAP, PPP 150p
558	C654	5359-1515851	CAP, PPP 150p
559	C655	5359-5115851	CAP, PPP 510p
559	C656	5359-5115851	CAP, PPP 510p

MISCELLANEOUS

901	SW12	4411-204714	SWITCH, ROTRAY

PCB-9 4/8Ω LED P.C.BOARD

CAPACITORS

934	C78	5345-106C0356	CAP, MINI ELE 10μ/16V
934	C79	5345-106C0356	CAP, MINI ELE 10μ/16V

DIODES

935	D78	5637-SLP965B	LED
935	D79	5637-SLP965B	LED

PCB-10 PIN JACK P.C.BOARD

CAPACITORS

613	C80	5345-337C041	CAP, MINI ELE 330μ/16V
613	C81	5345-337C041	CAP, MINI ELE 330μ/16V
060B	C551	5361-223ZF	CAP, CER .022μ G GB
060B	C552	5361-223ZF	CAP, CER .022μ G GB
058B	C553	5361-223ZF	CAP, CER .022μ G GB
598	C802	5345-106C041	CAP, MINI ELE 10μ/16V
596	C811	5345-107B041	CAP, MINI ELE 100μ/10V
596	C812	5345-107B041	CAP, MINI ELE 100μ/10V
596	C813	5345-107B041	CAP, MINI ELE 100μ/10V
597	C814	5345-337B041	CAP, MINI ELE 330μ/10V
597	C815	5345-337B041	CAP, MINI ELE 330μ/10V
597	C816	5345-337B041	CAP, MINI ELE 330μ/10V

RESISTORS

618	R80	5134-123J25P	RES, CBN 1/4P 12K
615	⚠R81	5102-3304715	RES, FUSE 33
617	R82	5176-S010J560	RES, MTL 1/2 56
617	R83	5176-S010J560	RES, MTL 1/2 56
617	R84	5176-S010J560	RES, MTL 1/2 56
649	R585	5134-102J25P	RES, CBN 1/4P 1K
649	R586	5134-102J25P	RES, CBN 1/4P 1K
648	R587	5134-471J25P	RES, CBN 1/4P 470
648	R588	5134-471J25P	RES, CBN 1/4P 470
601	R801	5232-272J16P	RES, CBN 1/6P 2.7K
600	R802	5232-122J16P	RES, CBN 1/6P 1.2K
603	R803	5232-393J16P	RES, CBN 1/6P 39K
603	R804	5232-393J16P	RES, CBN 1/6P 39K
603	R805	5232-393J16P	RES, CBN 1/6P 39K
603	R806	5232-393J16P	RES, CBN 1/6P 39K
603	R807	5232-393J16P	RES, CBN 1/6P 39K
603	R808	5232-393J16P	RES, CBN 1/6P 39K
602	R810	5232-750J16P	RES, CBN 1/6P 75
602	R811	5232-750J16P	RES, CBN 1/6P 75
602	R812	5232-750J16P	RES, CBN 1/6P 75
602	R813	5232-750J16P	RES, CBN 1/6P 75
602	R814	5232-750J16P	RES, CBN 1/6P 75
602	R815	5232-750J16P	RES, CBN 1/6P 75
604	R820	5232-271J16P	RES, CBN 1/6P 270
604	R821	5232-271J16P	RES, CBN 1/6P 270
604	R822	5232-271J16P	RES, CBN 1/6P 270
605	R823	5232-221J16P	RES, CBN 1/6P 220
605	R824	5232-221J16P	RES, CBN 1/6P 220
605	R825	5232-221J16P	RES, CBN 1/6P 220
605	R826	5232-221J16P	RES, CBN 1/6P 220
605	R827	5232-221J16P	RES, CBN 1/6P 220
605	R828	5232-221J16P	RES, CBN 1/6P 220
606	R829	5232-331J16P	RES, CBN 1/6P 330 UA BK N
606B	R829	5232-102J16P	RES, CBN 1/6P 1K G GB
606	R830	5232-331J16P	RES, CBN 1/6P 330 UA BK N
606B	R830	5232-102J16P	RES, CBN 1/6P 1K G GB
606	R831	5232-331J16P	RES, CBN 1/6P 330 UA BK N
606B	R831	5232-102J16P	RES, CBN 1/6P 1K G GB

INTEGRATED CIRCUITS

591	IC801	5654-TC4066BP	IC, DIGITAL
591	IC802	5654-TC4066BP	IC, DIGITAL

TRANSISTORS

609	Q80	5613-3422(O)or(Y)	XISTOR, NPN R
593	Q810	5611-1115(E)or(F)	XISTOR, PNP R
594	Q811	5613-2603(E)or(F)	XISTOR, NPN R
593	Q812	5611-1115(E)or(F)	XISTOR, PNP R
594	Q813	5613-2603(E)or(F)	XISTOR, NPN R
593	Q814	5611-1115(E)or(F)	XISTOR, PNP R
594	Q815	5613-2603(E)or(F)	XISTOR, NPN R

DIODES

611	D80	5635-HZ12C-2L	DIODE, ZENER

MISCELLANEOUS

921	J2	4484-47	PIN JACK, 4P UA BK G GB
921D	J2	4489-00201004	PIN JACK, MLT N
921	J3	4484-47	PIN JACK, 4P UA BK G GB
921D	J3	4489-00201004	PIN JACK, MLT N
924	J6	4486-16	PIN JACK, 6P UA BK G GB
924D	J6	4489-00401006	PIN JACK, MLT N
925	J7	4489-00101002	PIN JACK, MLT UA BK G GB
925D	J7	4489-00102002	PIN JACK, MLT N
925	J8	4489-00101002	PIN JACK, MLT UA BK G GB
925D	J8	4489-00102002	PIN JACK, MLT N
925	J9	4489-00101002	PIN JACK, MLT UA BK G GB
925D	J9	4489-00102002	PIN JACK, MLT N
592	RL801	5212-473J0301	R COMPOSITE
592	RL802	5212-473J0301	R COMPOSITE
710	LCN529	4163-0140020	CONNECTOR W/W
707	LCN801	4163-0145020	CONNECTOR W/W

PCB-11 EQUALIZER P.C.BOARD

CAPACITORS

061B	C555	5361-223ZF	CAP, CER .022μ G GB
545	C601	5345-106D0951	CAP, MINI ELE 10μ/25V
545	C602	5345-106D0951	CAP, MINI ELE 10μ/25V
555	C603	5353-121534	CAP, MCA 120p
555	C604	5353-121534	CAP, MCA 120p
554	C605	5359-1015851	CAP, PPP 100p
554	C606	5359-1015851	CAP, PPP 100p
546	C607	5345-477B0952	CAP, MINI ELE 470μ/10V
546	C608	5345-477B0952	CAP, MINI ELE 470μ/10V
548	C609	5345-226C041	CAP, MINI ELE 22μ/16V
548	C610	5345-226C041	CAP, MINI ELE 22μ/16V
551	C611	5354-822JIHM	CAP, MYL 8200p
551	C612	5354-822JIHM	CAP, MYL 8200p
552	C613	5354-223JIHM	CAP, MYL .022μ
552	C614	5354-223JIHM	CAP, MYL .022μ
550	C615	5354-562JIHM	CAP, MYL 5600p
550	C616	5354-562JIHM	CAP, MYL 5600p
556	C617	5359-2025851	CAP, PPP 2000p
556	C618	5359-2025851	CAP, PPP 2000p

Ser. No.	Ref. No.	Part No.	Description
556	C619	5359-2025851	CAP, PPP 2000p
556	C620	5359-2025851	CAP, PPP 2000p
547	C623	5345-106F0951	CAP, MINI ELE 10μ/50V
547	C624	5345-106F0951	CAP, MINI ELE 10μ/50V
716	C625	5345-337D041	CAP, MINI ELE 330μ/25V
716	C626	5345-337D041	CAP, MINI ELE 330μ/25V
716	C627	5345-337D041	CAP, MINI ELE 330μ/25V
716	C628	5345-337D041	CAP, MINI ELE 330μ/25V
557	C651	5359-3315851	CAP, PPP 330p
557	C652	5359-3315851	CAP, PPP 330p
053B	C681	5353-330534	CAP, MCA 33p G GB
053B	C682	5353-330534	CAP, MCA 33p G GB
052B	C683	5354-473593	CAP, MYL .047μ G GB
052B	C684	5354-473593	CAP, MYL .047μ G GB
051B	C685	5359-6815851	CAP, PPP 680p G GB
051B	C686	5359-6815851	CAP, PPP 680p G GB
512	C703	5345-106F0951	CAP, MINI ELE 10μ/50V
512	C704	5345-106F0951	CAP, MINI ELE 10μ/50V
512	C705	5345-106F0951	CAP, MINI ELE 10μ/50V
512	C706	5345-106F0951	CAP, MINI ELE 10μ/50V
511	C707	5345-337C041	CAP, MINI ELE 330μ/16V
511	C708	5345-337C041	CAP, MINI ELE 330μ/16V
511	C709	5345-337C041	CAP, MINI ELE 330μ/16V
511	C710	5345-337C041	CAP, MINI ELE 330μ/16V
587	C808	5354-102JIHM	CAP, MYL 1000p
		RESISTORS	
567	R601	5134-470J25P	RES, CBN 1/4P 47
567	R602	5134-470J25P	RES, CBN 1/4P 47
580	R603	5134-823J25P	RES, CBN 1/4P 82K
580	R604	5134-823J25P	RES, CBN 1/4P 82K
568	R605	5134-124J25P	RES, CBN 1/4P 120K
568	R606	5134-124J25P	RES, CBN 1/4P 120K
569	R607	5134-473J25P	RES, CBN 1/4P 47K
569	R608	5134-473J25P	RES, CBN 1/4P 47K
570	R609	5134-332J25P	RES, CBN 1/4P 3.3K
570	R610	5134-332J25P	RES, CBN 1/4P 3.3K
570	R611	5134-332J25P	RES, CBN 1/4P 3.3K
570	R612	5134-332J25P	RES, CBN 1/4P 3.3K
581	R613	5134-331J25P	RES, CBN 1/4P 330
581	R614	5134-331J25P	RES, CBN 1/4P 330
581	R615	5134-331J25P	RES, CBN 1/4P 330
581	R616	5134-331J25P	RES, CBN 1/4P 330
581	R617	5134-331J25P	RES, CBN 1/4P 330
581	R618	5134-331J25P	RES, CBN 1/4P 330
581	R619	5134-331J25P	RES, CBN 1/4P 330
581	R620	5134-331J25P	RES, CBN 1/4P 330
561	R621	5174-Z634038	RES, MTL 1/4 634
561	R622	5174-Z634038	RES, MTL 1/4 634
571	R623	5134-222J25P	RES, CBN 1/4P 2.2K
571	R624	5134-222J25P	RES, CBN 1/4P 2.2K
571	R625	5134-222J25P	RES, CBN 1/4P 2.2K
571	R626	5134-222J25P	RES, CBN 1/4P 2.2K
565	R627	5174-102381	RES, MTL 1/4 1K
565	R628	5174-102381	RES, MTL 1/4 1K
572	R629	5134-682J25P	RES, CBN 1/4P 6.8K
572	R630	5134-682J25P	RES, CBN 1/4P 6.8K
572	R631	5134-682J25P	RES, CBN 1/4P 6.8K
572	R632	5134-682J25P	RES, CBN 1/4P 6.8K
573	R633	5134-471J25P	RES, CBN 1/4P 470
573	R634	5134-471J25P	RES, CBN 1/4P 470
573	R635	5134-471J25P	RES, CBN 1/4P 470
573	R636	5134-471J25P	RES, CBN 1/4P 470
576	R637	5134-330J25P	RES, CBN 1/4P 33
576	R638	5134-330J25P	RES, CBN 1/4P 33
576	R639	5134-330J25P	RES, CBN 1/4P 33
576	R640	5134-330J25P	RES, CBN 1/4P 33
574	R641	5134-103J25P	RES, CBN 1/4P 10K
574	R642	5134-103J25P	RES, CBN 1/4P 10K
575	R643	5134-122J25P	RES, CBN 1/4P 1.2K
575	R644	5134-122J25P	RES, CBN 1/4P 1.2K
564	R645	5174-Z549338	RES, MTL 1/4 549K
564	R646	5174-Z549338	RES, MTL 1/4 549K
563	R647	5174-Z412238	RES, MTL 1/4 41.2K
563	R648	5174-Z412238	RES, MTL 1/4 41.2K
577	R649	5134-102J25P	RES, CBN 1/4P 1K
577	R650	5134-102J25P	RES, CBN 1/4P 1K
579	R651	5134-104J25P	RES, CBN 1/4P 100K
579	R652	5134-104J25P	RES, CBN 1/4P 100K
719	R653	5134-822J25P	RES, CBN 1/4P 8.2K
719	R654	5134-822J25P	RES, CBN 1/4P 8.2K
718	R655	5176-S010J330	RES, MTL 1/2 33
718	R656	5176-S010J330	RES, MTL 1/2 33
717	⚠R657	5102-2204715	RES, FUSE 22
717	⚠R658	5102-2204715	RES, FUSE 22
578	R659	5134-471J25P	RES, CBN 1/4P 470
578	R660	5134-471J25P	RES, CBN 1/4P 470
562	R661	5174-Z169338	RES, MTL 1/4 169K
562	R662	5174-Z169338	RES, MTL 1/4 169K
582	R663	5134-105J25P	RES, CBN 1/4P 1M
582	R664	5134-105J25P	RES, CBN 1/4P 1M
718	R669	5176-S010J330	RES, MTL 1/2 33
718	R670	5176-S010J330	RES, MTL 1/2 33
055B	R681	5134-102J25P	RES, CBN 1/4P 1K G GB
055B	R682	5134-102J25P	RES, CBN 1/4P 1K G GB
055B	R683	5134-102J25P	RES, CBN 1/4P 1K G GB
055B	R684	5134-102J25P	RES, CBN 1/4P 1K G GB
516	R701	5134-1R0J25P	RES, CBN 1/4P 1 UA BK N
516B	R701	5134-5R6J25P	RES, CBN 1/4P 5.6 G GB
516	R702	5134-1R0J25P	RES, CBN 1/4P 1 UA BK N
516B	R702	5134-5R6J25P	RES, CBN 1/4P 5.6 G GB
519	R703	5134-560J25P	RES, CBN 1/4P 56
519	R704	5134-560J25P	RES, CBN 1/4P 56
521	R705	5134-472J25P	RES, CBN 1/4P 4.7K
521	R706	5134-472J25P	RES, CBN 1/4P 4.7K
521	R707	5134-472J25P	RES, CBN 1/4P 4.7K
521	R708	5134-472J25P	RES, CBN 1/4P 4.7K
517	R709	5134-100J25P	RES, CBN 1/4P 10
517	R710	5134-100J25P	RES, CBN 1/4P 10
517	R711	5134-100J25P	RES, CBN 1/4P 10
517	R712	5134-100J25P	RES, CBN 1/4P 10
518	R713	5134-220J25P	RES, CBN 1/4P 22
518	R714	5134-220J25P	RES, CBN 1/4P 22
518	R715	5134-220J25P	RES, CBN 1/4P 22
518	R716	5134-220J25P	RES, CBN 1/4P 22
515	R717	5174-561381	RES, MTL 1/4 560
515	R718	5174-561381	RES, MTL 1/4 560
515	R719	5174-561381	RES, MTL 1/4 560
515	R720	5174-561381	RES, MTL 1/4 560
520	R721	5134-392J25P	RES, CBN 1/4P 3.9K
520	R722	5134-392J25P	RES, CBN 1/4P 3.9K
522	R723	5134-681J25P	RES, CBN 1/4P 680
522	R724	5134-681J25P	RES, CBN 1/4P 680
523	R727	5134-331J25P	RES, CBN 1/4P 330
523	R728	5134-331J25P	RES, CBN 1/4P 330
588	R816	5134-104J25P	RES, CBN 1/4P 100K
588	R817	5134-104J25P	RES, CBN 1/4P 100K
589	R818	5134-103J25P	RES, CBN 1/4P 10K
590	R819	5134-105J25P	RES, CBN 1/4P 1M
		TRANSISTORS	
531	Q601	5613-2240(BL)	XISTOR, NPN R
531	Q602	5613-2240(BL)	XISTOR, NPN R
531	Q603	5613-2240(BL)	XISTOR, NPN R
531	Q604	5613-2240(BL)	XISTOR, NPN R
532	Q605	5613-2603(E)or(F)	XISTOR, NPN R
532	Q606	5613-2603(E)or(F)	XISTOR, NPN R
532	Q607	5613-2603(E)or(F)	XISTOR, NPN R
532	Q608	5613-2603(E)or(F)	XISTOR, NPN R
533	Q609	5611-999L(F)	XISTOR, PNP R
533	Q610	5611-999L(F)	XISTOR, PNP R
538	Q611	5613-2320L(F)	XISTOR, NPN R
538	Q612	5613-2320L(F)	XISTOR, NPN R
533	Q613	5611-999L(F)	XISTOR, PNP R
533	Q614	5611-999L(F)	XISTOR, PNP R
535	Q615	5612-646(C)	XISTOR, PNP A
535	Q616	5612-646(C)	XISTOR, PNP A
534	Q617	5614-666(C)	XISTOR, NPN A

Ser. No.	Ref. No.	Part No.	Description
534	Q618	5614-666(C)	XISTOR, NPN A
536	Q619	5614-667(C)	XISTOR, NPN A
536	Q620	5614-667(C)	XISTOR, NPN A
537	Q621	5612-647(C)	XISTOR, PNP A
537	Q622	5612-647(C)	XISTOR, PNP A
711	Q623	5613-3298(O)or(Y)	XISTOR, NPN R
713	Q624	5611-1306(O)or(Y)	XISTOR, PNP R
502	Q701	5611-1190(E)	XISTOR, PNP R
502	Q702	5611-1190(E)	XISTOR, PNP R
501	Q703	5613-2855(D)	XISTOR, NPN R
501	Q704	5613-2855(D)	XISTOR, NPN R
501	Q705	5613-2855(D)	XISTOR, NPN R
501	Q706	5613-2855(D)	XISTOR, NPN R
502	Q707	5611-1190(E)	XISTOR, PNP R
502	Q708	5611-1190(E)	XISTOR, PNP R
503	Q709	5613-2603(E)or(F)	XISTOR, NPN R
504	Q710	5611-1115(E)or(F)	XISTOR, PNP R
504	Q711	5611-1115(E)or(F)	XISTOR, PNP R
503	Q712	5613-2603(E)or(F)	XISTOR, NPN R
505	Q713	5616-2SK373GR	FET, N-CH
505	Q714	5616-2SK373GR	FET, N-CH
585	Q803	5611-1115(E)	XISTOR, PNP R
585	Q804	5611-1115(E)	XISTOR, PNP R
586	Q805	5616-2SK364(V)or(BL)	FET, N-CH
586	Q806	5616-2SK364(V)or(BL)	FET, N-CH
		DIODES	
541	D601	5631-1S2473	DIODE, DET
541	D602	5631-1S2473	DIODE, DET
542	D603	5641-MV103	VARISTOR
542	D604	5641-MV103	VARISTOR
715	D605	5635-HZ24-2L	DIODE, ZENER
715	D606	5635-HZ24-2L	DIODE, ZENER
508	D701	5635-HZ15-1L	DIODE, ZENER
508	D702	5635-HZ15-1L	DIODE, ZENER
		COILES	
056B	L701	5597-3	CORE, BEADS G GB
056B	L702	5597-3	CORE, BEADS G GB
		MISCELLANEOUS	
922	J4	4484-47	PIN JACK, 4P UA BK N
922D	J4	4484-36	PIN JACK, 4P G GB
923	J5	4486-9	PIN JACK, 6P UA BK N
923D	J5	4489-00301006	PIN JACK, MLT G GB
583	LCN517	4163-0125020	CONNECTOR W/W
944	CN304	4443-070185	CONNECTOR
941	CN402	4443-030185	CONNECTOR
941	CN501	4443-030185	CONNECTOR
941	CN507	4443-030185	CONNECTOR
941	CN515	4443-030185	CONNECTOR
895	SW9	4422-70211	SWITCH, REMOTE

PCB-12 4/8Ω P.C.BOARD

		CAPACITORS	
886	C77	5345-107D041	CAP, MINI ELE 100μ/25V
885	C96	5345-476C041	CAP, MINI ELE 47μ/16V
		RESISTORS	
888	⚠R76	5102-2214713	RES, FUSE 220
889	⚠R77	5102-2214715	RES, FUSE 220
890	⚠R78	5102-5R64713	RES, FUSE 5.6
		DIODES	
884	D75	5632-S5566B	DIODE, RECT
884	D76	5632-S5566B	DIODE, RECT
		MISCELLANEOUS	
985	JL804	4242-R0303451	JUMPER LEAD
951	TM301	4214-11034	TERMINAL

Ser. No.	Ref. No.	Part No.	Description

CHASSIS MISCELLANEOUS

866	⚠F1	5732-632029	FUSE UA BK N
866D	⚠F1	5732-632050	FUSE G GB
867	⚠F2	5732-502029	FUSE UA BK N
867D	⚠F2	5732-502050	FUSE G GB
867	⚠F3	5732-502029	FUSE UA BK N
867D	⚠F3	5732-502050	FUSE G GB
867	⚠F4	5732-502029	FUSE UA BK N
867D	⚠F4	5732-502050	FUSE G GB
867	⚠F5	5732-502029	FUSE UA BK N
867D	⚠F5	5732-502050	FUSE G GB
861	⚠T1	5584-S02	XFORMER, POWER UA BK
861B	⚠T1	5584-S03	XFORMER, POWER G GB
861D	⚠T1	5584-S04	XFORMER, POWER N
926	⚠SO1	4474-156	SOCKET UA BK N
930	⚠P1	4161-71151	CORD W/PLUG UA BK
930B	⚠P1	4161-7256	CORD W/PLUG G GB
930D	⚠P1	4161-71148	CORD W/PLUG N
065B	LUG1	4211-4	LUG G GB
065B	LUG2	4211-4	LUG G GB
065B	LUG3	4211-4	LUG G GB
065B	LUG4	4211-4	LUG G GB
868		4472-7113	HOLDER, FUSE UA BK N
868B		4472-7122	HOLDER, FUSE G GB
932		4442-14	PIN PLUG
041B	⚠SW101	4411-102729	ROTARY SWITCH G GB
896	SW102	4421-0227230	SLIDE SWITCH

PACKAGE PARTS LIST

021B	1759-06303	LABEL G GB
022B	1756-03108	LABEL G GB
022D	1756-03113	LABEL N
028B	1119-026	ATTACH SHEET G GB
106	1111-J90195	OWNER GUIDE UA BK
107	1111-J30271	OWNER GUIDE UA BK
107B	1111-J30272	OWNER GUIDE G GB
107D	1111-J2040	OWNER GUIDE N
108	1113-717004	OWNER GUIDE UA BK
108D	1113-0C	OWNER GUIDE N
109	1119-047	ATTACH SHEET UA BK
109D	1116-GC	ATTACH SHEET N
110	1119-0137	ATTACH SHEET UA BK
121	1241-C12732	POLYETHYLENE BAG
122	1241-C1492	POLYETHYLENE BAG
124	1221-797143	CARTON BOX UA G
124A	1221-817143	CARTON BOX G GB N
125	1222-7225	CUSHION
126	1222-7226	CUSHION
127	1223-11729	SOFT SHEET

ABBREVIATIONS IN PARTS LIST

CAPACITORS

CAP, MINI ELE : Electrolytic
CAP, CER : Ceramic
CAP, PPP : Polypropylene
CAP, MYL : Mylar
CAP, MCA : Mica
CAP, MINI BP : Bipolar
CAP, ELE BP : Electrolytic Bipolar
CAP, STY : Polystyrene Film
CAP, SPE : Special
CAP, TAN : Tantalum
470μ : 470μF
6800p : 6800pF
.047μ : 0.047μF

RESISTORS

RES, CBN 1/6P : Carbon 1/6W
RES, FUSE : Fuse
RES, CEM 5P : Cement 5W
RES, MTL 1P : Metal 1W
2.2K : 2.2kΩ
220 : 220Ω

TRANSISTORS

XISTOR : Transistor
FET : Field Effect Transistor

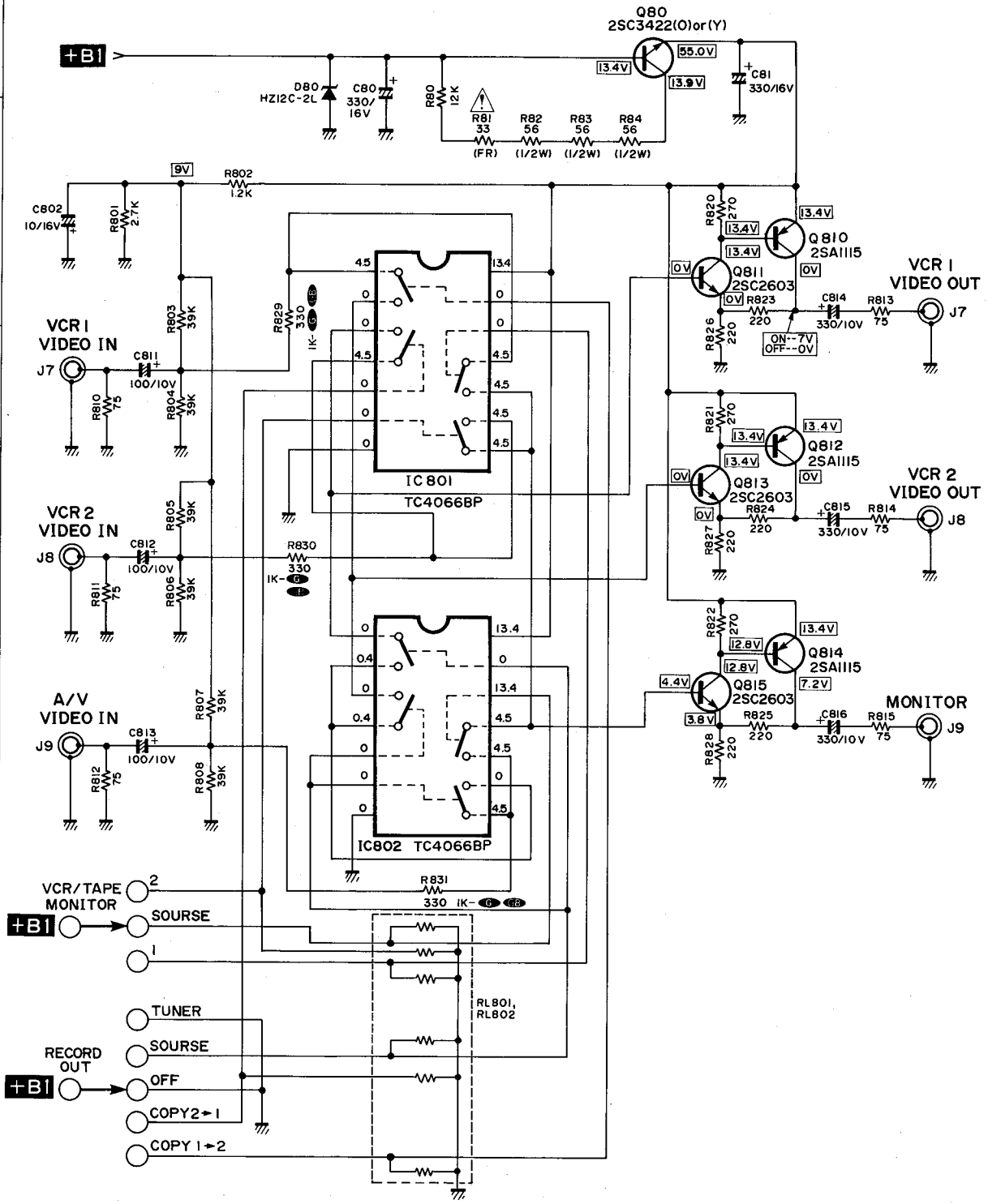
CONTROLS

RES, V CBN : Variable Carbon Resistor
RES, SEMI FIX : Semi-fixed Resistor

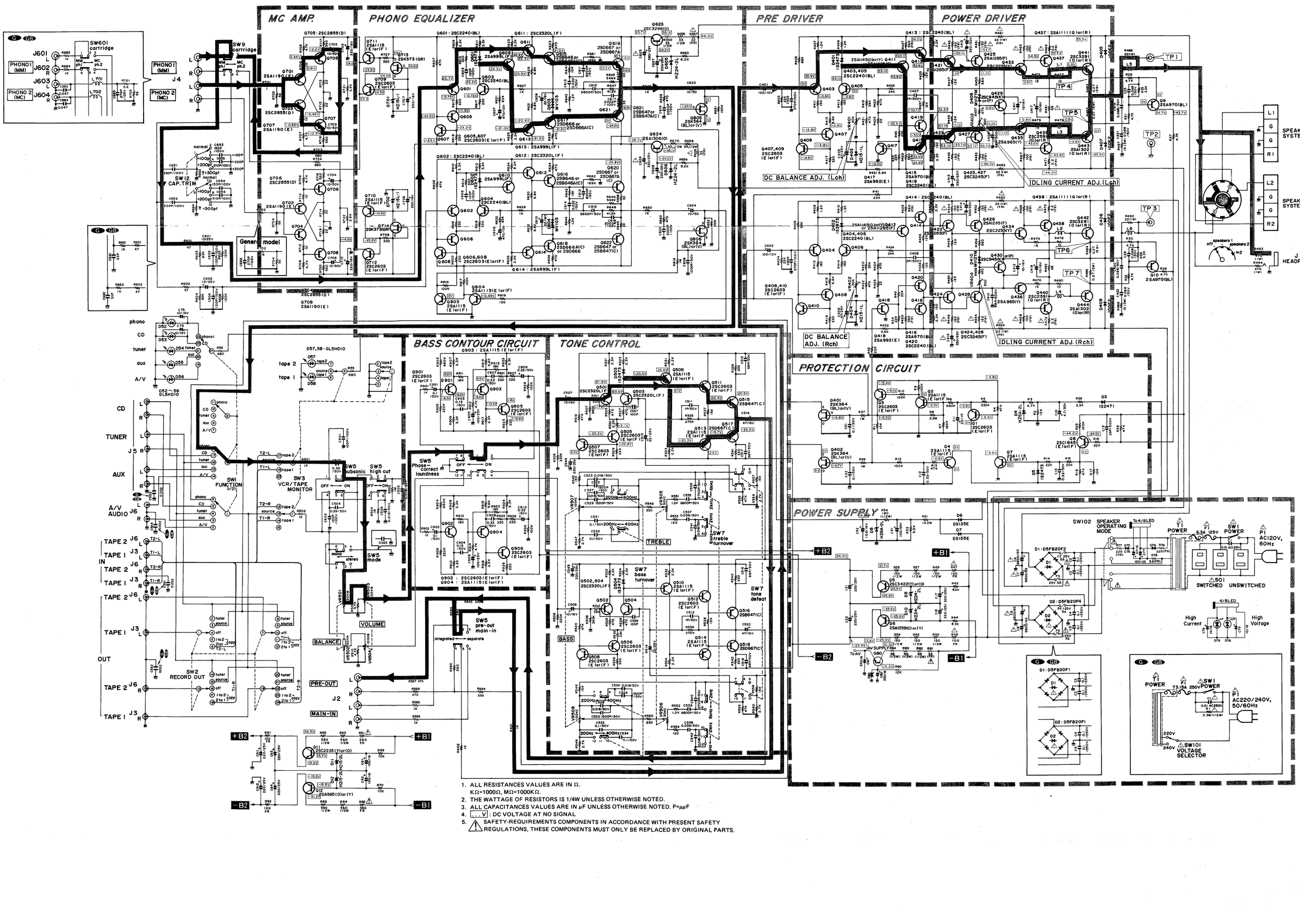
NOTE

⚠ SAFETY RELATED COMPONENT. USE ONLY EXACT REPLACEMENT PART AS SPECIFIED.

SCHEMATIC DIAGRAM

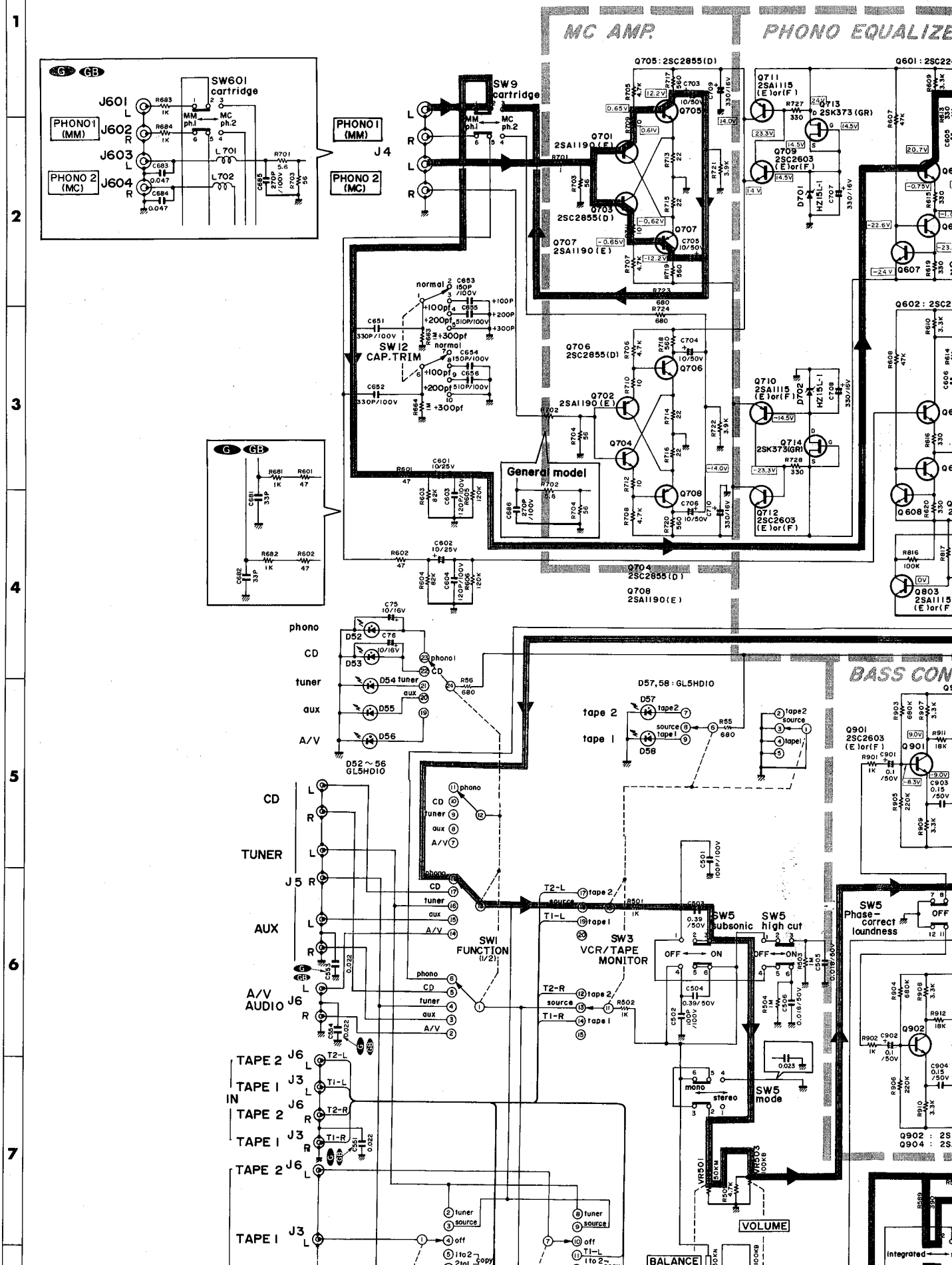


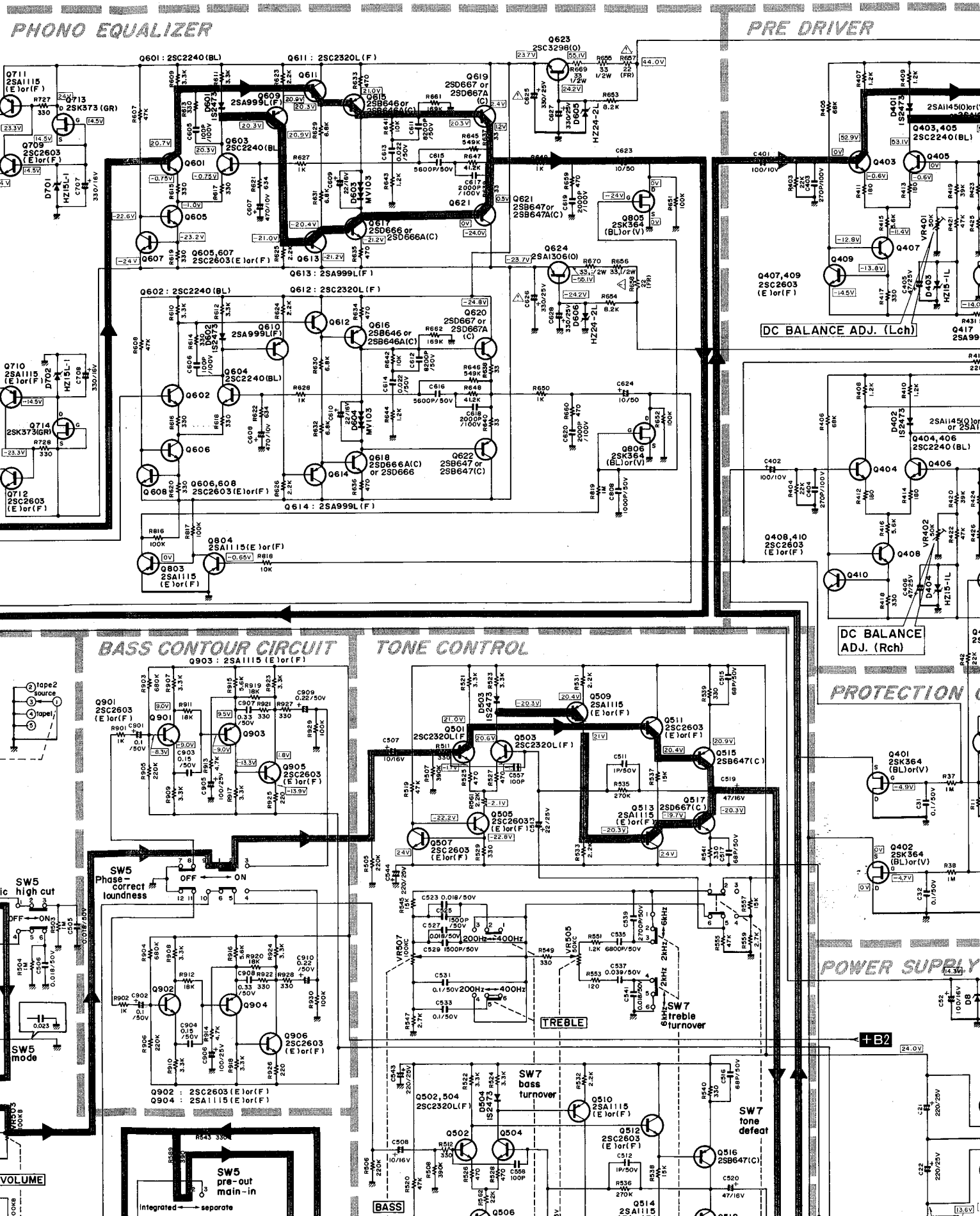
SCHEMATIC DIAGRAM



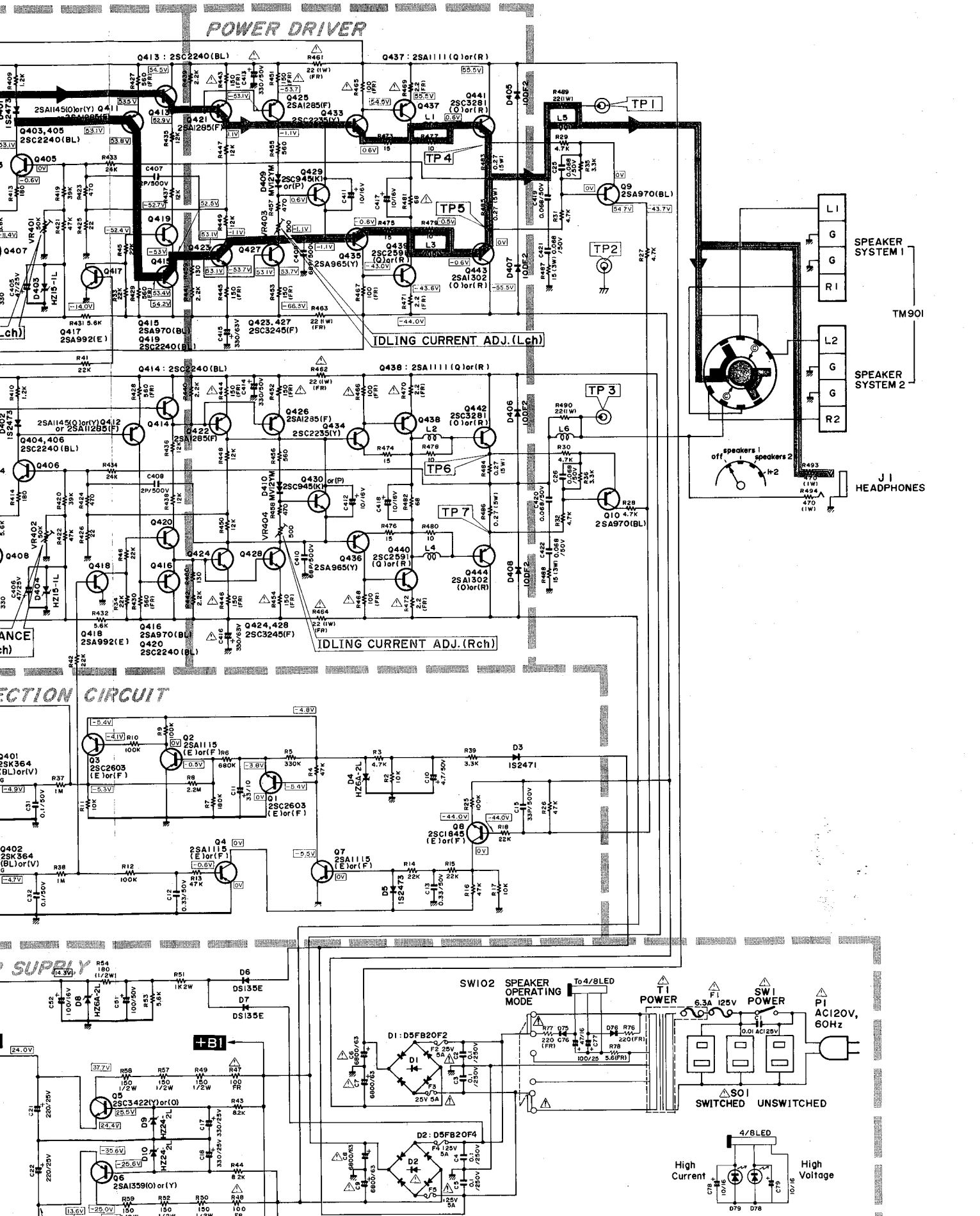
1. ALL RESISTANCES VALUES ARE IN Ω.
   KΩ=1000Ω, MΩ=1000KΩ.
2. THE WATTAGE OF RESISTORS IS 1/4W UNLESS OTHERWISE NOTED.
3. ALL CAPACITANCES VALUES ARE IN μF UNLESS OTHERWISE NOTED. P=μμF
4. [...V] : DC VOLTAGE AT NO SIGNAL
5. ⚠ SAFETY-REQUIREMENTS COMPONENTS IN ACCORDANCE WITH PRESENT SAFETY REGULATIONS, THESE COMPONENTS MUST ONLY BE REPLACED BY ORIGINAL PARTS.

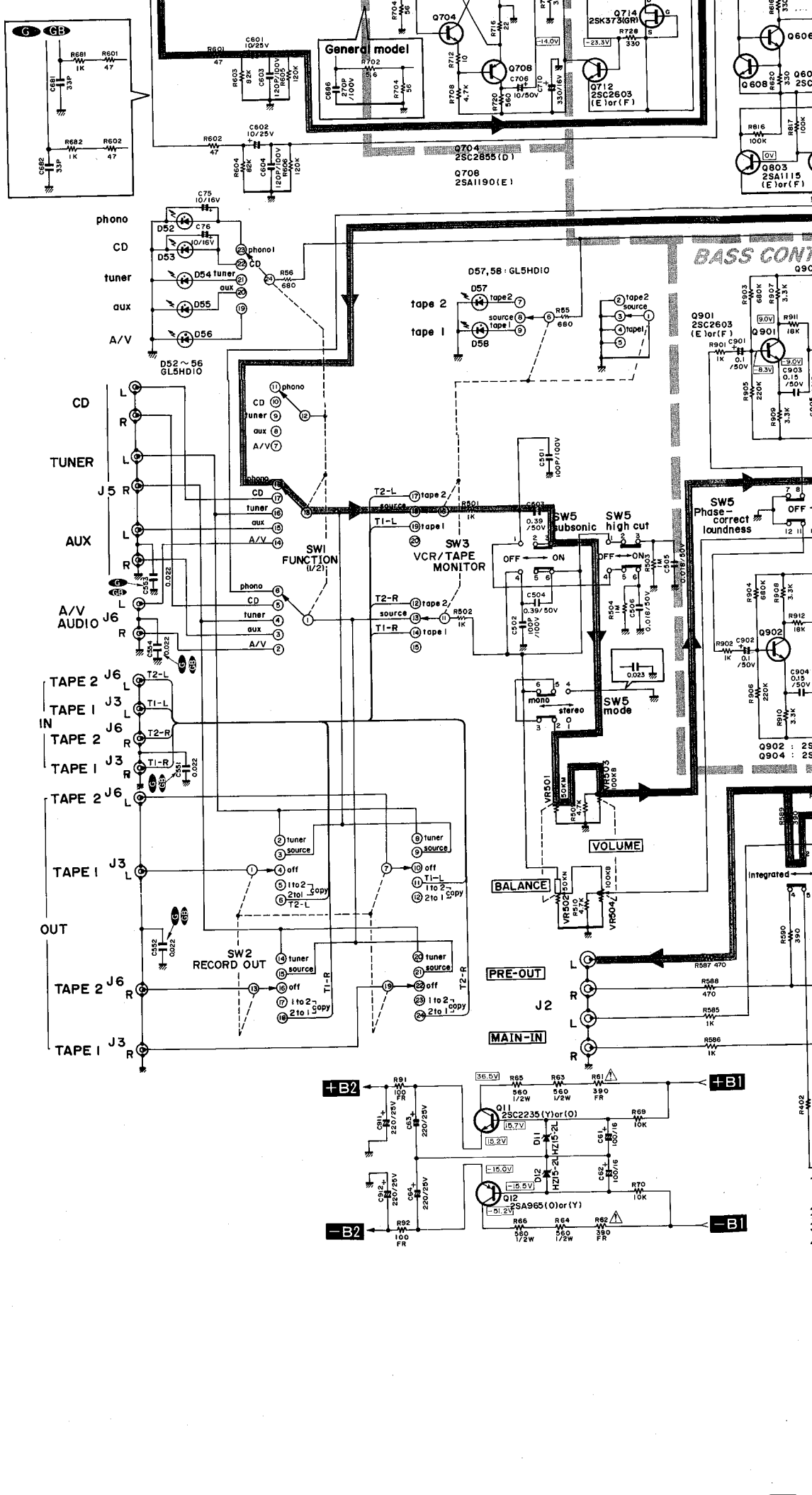
SCHEMATIC DIAGRAM

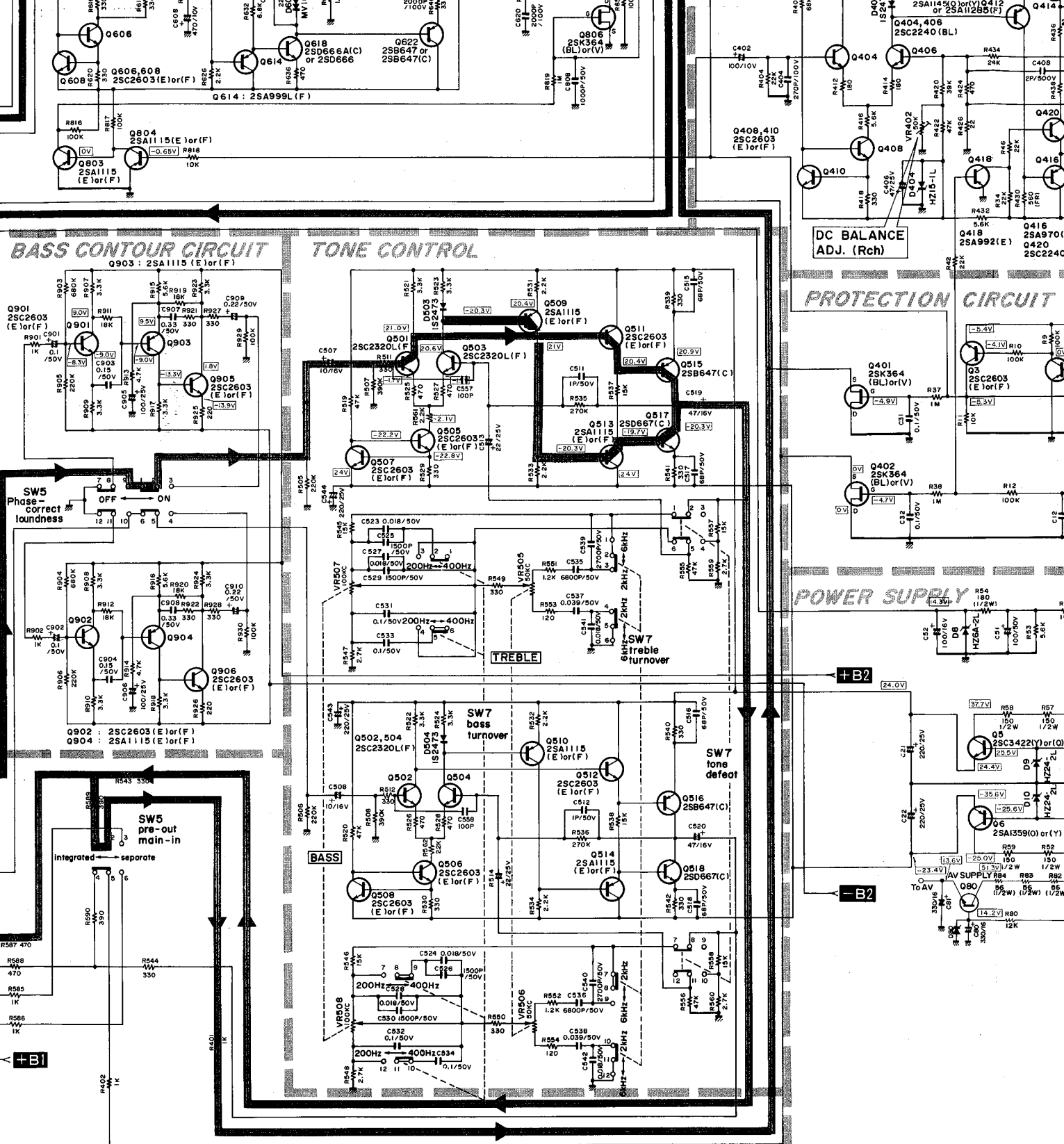



PHONO EQUALIZER
PRE DRIVER
BASS CONTOUR CIRCUIT
TONE CONTROL
PROTECTION
POWER SUPPLY
DC BALANCE ADJ. (Lch)
DC BALANCE ADJ. (Rch)
Q601 : 2SC2240(BL)
Q611 : 2SC2320L(F)
Q602 : 2SC2240(BL)
Q612 : 2SC2320L(F)
Q605,607 2SC2603(E)or(F)
Q613 : 2SA999L(F)
Q606,608 2SC2603(E)or(F)
Q614 : 2SA999L(F)
Q623 2SC3298(O)
Q624 2SA1306(O)
Q621 2SB647or 2SB647A(C)
Q622 2SB647or 2SB647A(C)
Q805 2SK364 (BL)or(V)
Q806 2SK364 (BL)or(V)
Q407,409 2SC2603 (E)or(F)
Q408,410 2SC2603 (E)or(F)
Q404,406 2SC2240(BL)
Q403,405 2SC2240(BL)
Q803 2SA1115 (E)or(F)
Q804 2SA1115(E)or(F)
Q901 2SC2603 (E)or(F)
Q902 : 2SC2603(E)or(F)
Q904 : 2SA1115(E)or(F)
Q502,504 2SC2320L(F)
TREBLE
BASS
SW5 Phase-correct loundness
SW5 pre-out main-in
SW5 mode
SW7 bass turnover
SW7 treble turnover
SW7 tone defeat
+B2
VOLUME

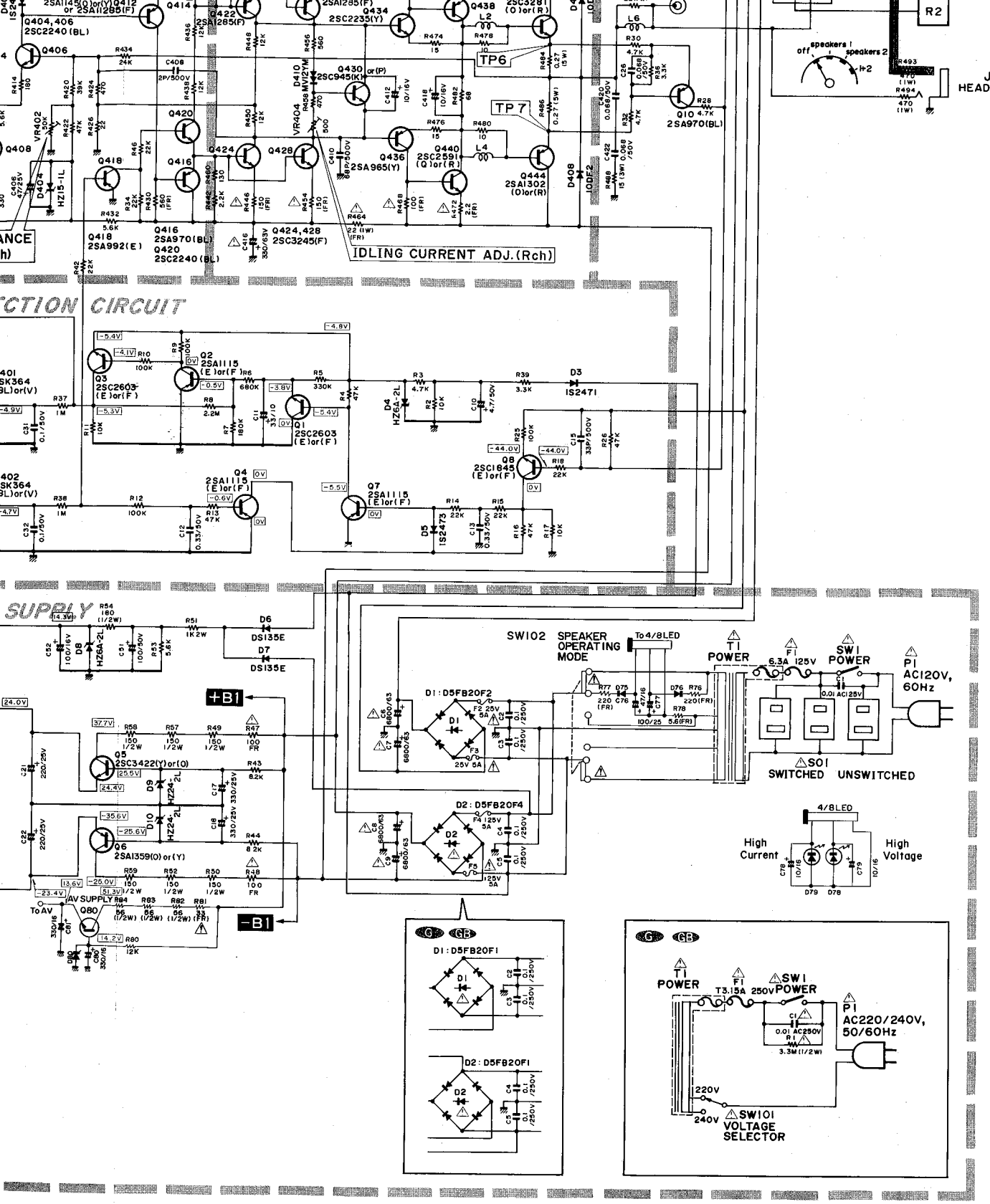
J K L M N


POWER DRIVER
Q413 : 2SC2240(BL)
Q437 : 2SAIIII(Q)or(R)
Q403,405 2SC2240(BL)
Q421 2SA1285(F)
Q425 2SA1285(F)
Q433 2SC2235(Y)
Q441 2SC3281 (O)or(R)
Q437
Q405
Q429 2SC945(K) or(P)
Q419
Q423
Q427
Q435 2SA965(Y)
Q439 2SA1302 (O)or(R)
Q407
Q415
Q417 2SA992(E)
Q415 2SA970(BL)
Q419 2SC2240(BL)
Q423,427 2SC3245(F)
TP1
TP2
TP4
TP5
Q9 2SA970(BL)
L1
L5
L3
IDLING CURRENT ADJ.(Lch)
SPEAKER SYSTEM 1
SPEAKER SYSTEM 2
TM901
L1
G
G
R1
L2
G
G
R2
Q414 : 2SC2240(BL)
Q438 : 2SAIIII(Q)or(R)
Q404,406 2SC2240(BL)
Q422 2SA1285(F)
Q426 2SA1285(F)
Q434 2SC2235(Y)
Q442 2SC3281 (O)or(R)
Q406
Q430 or(P) 2SC945(K)
Q420
Q424
Q428
Q436 2SA965(Y)
Q440 2SC2591 (Q)or(R)
Q444 2SA1302 (O)or(R)
Q408
Q416
Q418 2SA992(E)
Q416 2SA970(BL)
Q420 2SC2240(BL)
Q424,428 2SC3245(F)
TP3
TP6
TP7
Q10 2SA970(BL)
IDLING CURRENT ADJ.(Rch)
speakers 1
off
speakers 2
J1 HEADPHONES
ECTION CIRCUIT
Q1 2SC2603 (E)or(F)
Q2 2SAIIII5 (E)or(F)
Q3 2SC2603 (E)or(F)
Q4 2SAIIII5 (E)or(F)
Q7 2SAIIII5 (E)or(F)
Q8 2SCI845 (E)or(F)
D3 IS2471
D4 HZ6-2L
D5 1S2473
SUPPLY
D6 DS135E
D7 DS135E
D8 HZ6A-2L
+B1
Q5 2SC3422(Y)or(O)
D9 HZ24-2L
D10 HZ24-2L
Q6 2SAI359(O) or (Y)
SW102 SPEAKER OPERATING MODE
To4/8LED
T1 POWER
F1 6.3A 125V
SW1 POWER
P1 AC120V, 60Hz
D1 : D5FB20F2
D2 : D5FB20F4
SWITCHED
UNSWITCHED
4/8LED
High Current
High Voltage
D79
D78

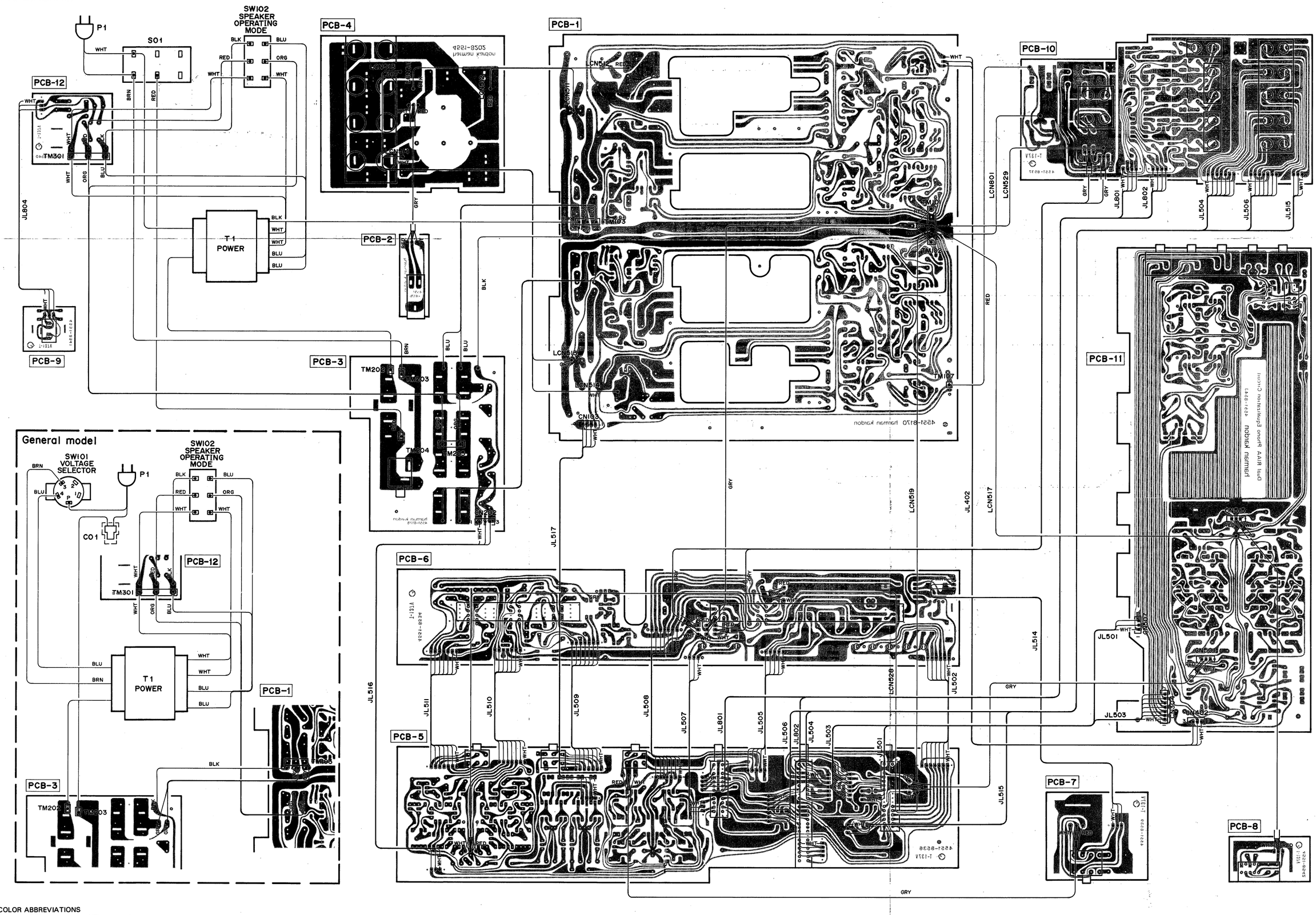

General model
Q704
2SC2855(D)
Q708
2SA1190(E)
Q712
2SC2603
(E)or(F)
Q714
2SK373(GR)
Q608
Q803
2SA1115
(E)or(F)
D52~56
GL5HD10
D57,58 : GL5HD10
phono
CD
tuner
aux
A/V
tape 2
tape 1
BASS CONT
Q901
2SC2603
(E)or(F)
Q902
2SC2603
(E)or(F)
SW1
FUNCTION
(1/2)
SW3
VCR/TAPE
MONITOR
SW5
subsonic
SW5
high cut
SW5
Phase-
correct
loundness
SW5
mode
VOLUME
BALANCE
Integrated
SW2
RECORD OUT
PRE-OUT
J2
MAIN-IN
OUT
IN
TAPE 2
TAPE 1
+B2
-B2
+B1
-B1
Q11
2SC2235(Y)or(O)
Q12
2SA965(O)or(Y)
HZ15-2L
HZ15-2L



1. ALL RESISTANCES VALUES ARE IN Ω.
   KΩ=1000Ω, MΩ=1000KΩ.
2. THE WATTAGE OF RESISTORS IS 1/4W UNLESS OTHERWISE NOTED.
3. ALL CAPACITANCES VALUES ARE IN μF UNLESS OTHERWISE NOTED. P=μμF
4. [. . . V] : DC VOLTAGE AT NO SIGNAL
5. ⚠ SAFETY-REQUIREMENTS COMPONENTS IN ACCORDANCE WITH PRESENT SAFETY REGULATIONS, THESE COMPONENTS MUST ONLY BE REPLACED BY ORIGINAL PARTS.


IDLING CURRENT ADJ.(Rch)
J1 HEADPHONES
TP6
TP7
speakers 1
speakers 2
off
R2
Q404,406 2SC2240(BL)
Q406
Q408
Q414
Q422 2SA1285(F)
Q434 2SC2235(Y)
Q438 2SC3281 (O)or(R)
Q430 or(P) 2SC945(K)
Q420
Q424
Q426
Q436 2SA965(Y)
Q440 2SC2591 (Q)or(R)
Q444 2SA1302 (O)or(R)
Q10 2SA970(BL)
Q418 2SA992(E)
Q416 2SA970(BL)
Q420 2SC2240(BL)
Q424,428 2SC3245(F)
VR402 50K
VR404 500
D404 HZ15-1L
D410 MV127M
D408 10DF2
L2
L4
L6
FCTION CIRCUIT
Q1 2SC2603 (E)or(F)
Q2 2SA1115 (E)or(F)
Q3 2SC2603 (E)or(F)
Q4 2SA1115 (E)or(F)
Q7 2SA1115 (E)or(F)
Q8 2SC1845 (E)or(F)
D3 IS2471
D4 HZ6A-2L
D5 IS2473
SUPPLY
D6 DS135E
D7 DS135E
D8 HZ6A-2L
D9 HZ24-2L
D10 HZ22-2L
Q5 2SC3422(Y)or(O)
Q6 2SA1359(O)or(Y)
Q80
+B1
-B1
To AV
AV SUPPLY
SW102 SPEAKER OPERATING MODE
To4/8LED
D1:D5FB20F2
D2:D5FB20F4
D1:D5FB20F1
D2:D5FB20F1
TI POWER
FI 6.3A 125V
SWI POWER
PI AC120V, 60Hz
SO1 SWITCHED UNSWITCHED
4/8LED
High Current
High Voltage
GB
TI POWER
FI T3.15A 250V
SWI POWER
PI AC220/240V, 50/60Hz
220V
240V
SW101 VOLTAGE SELECTOR

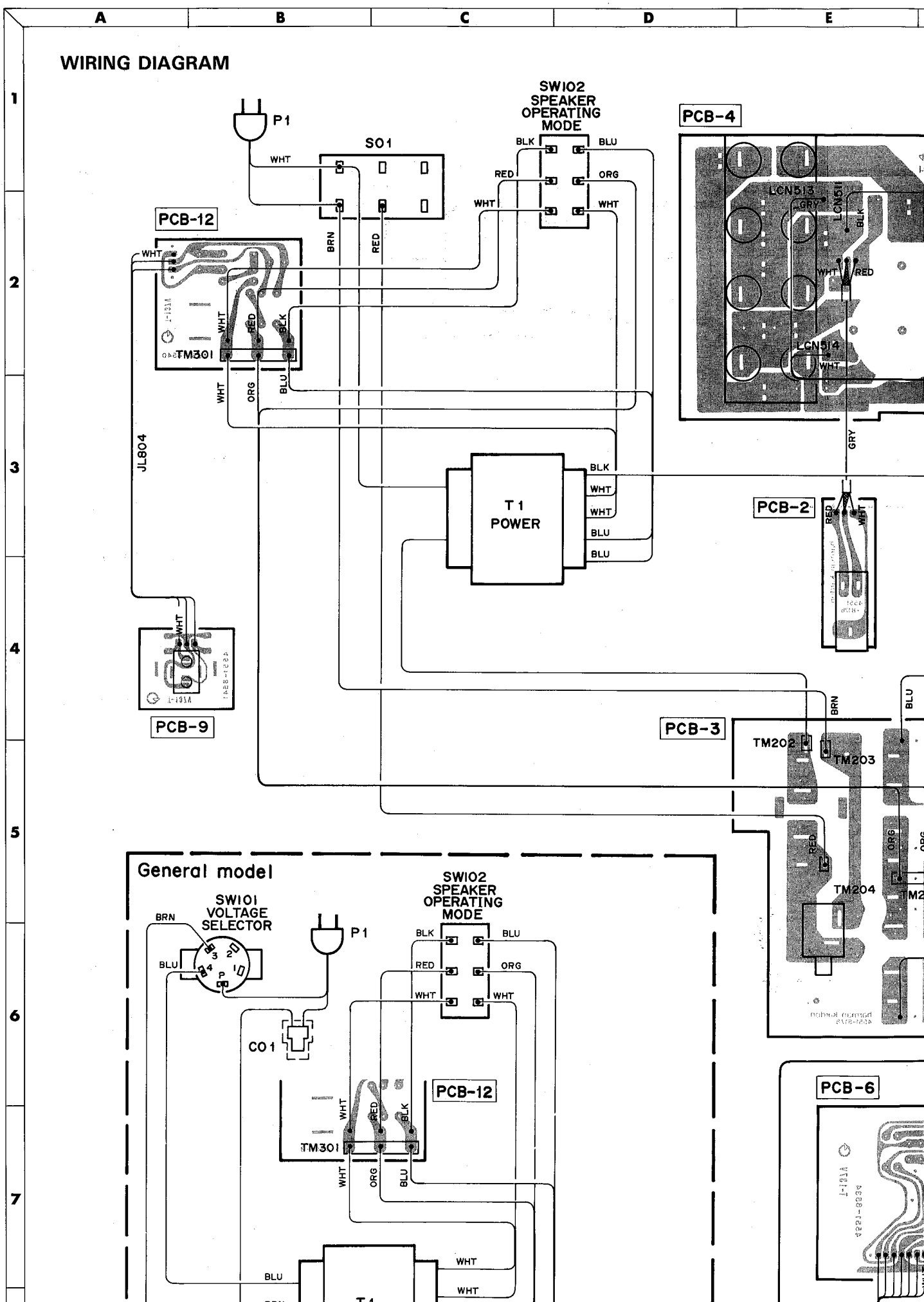
WIRING DIAGRAM



WIRE COLOR ABBREVIATIONS

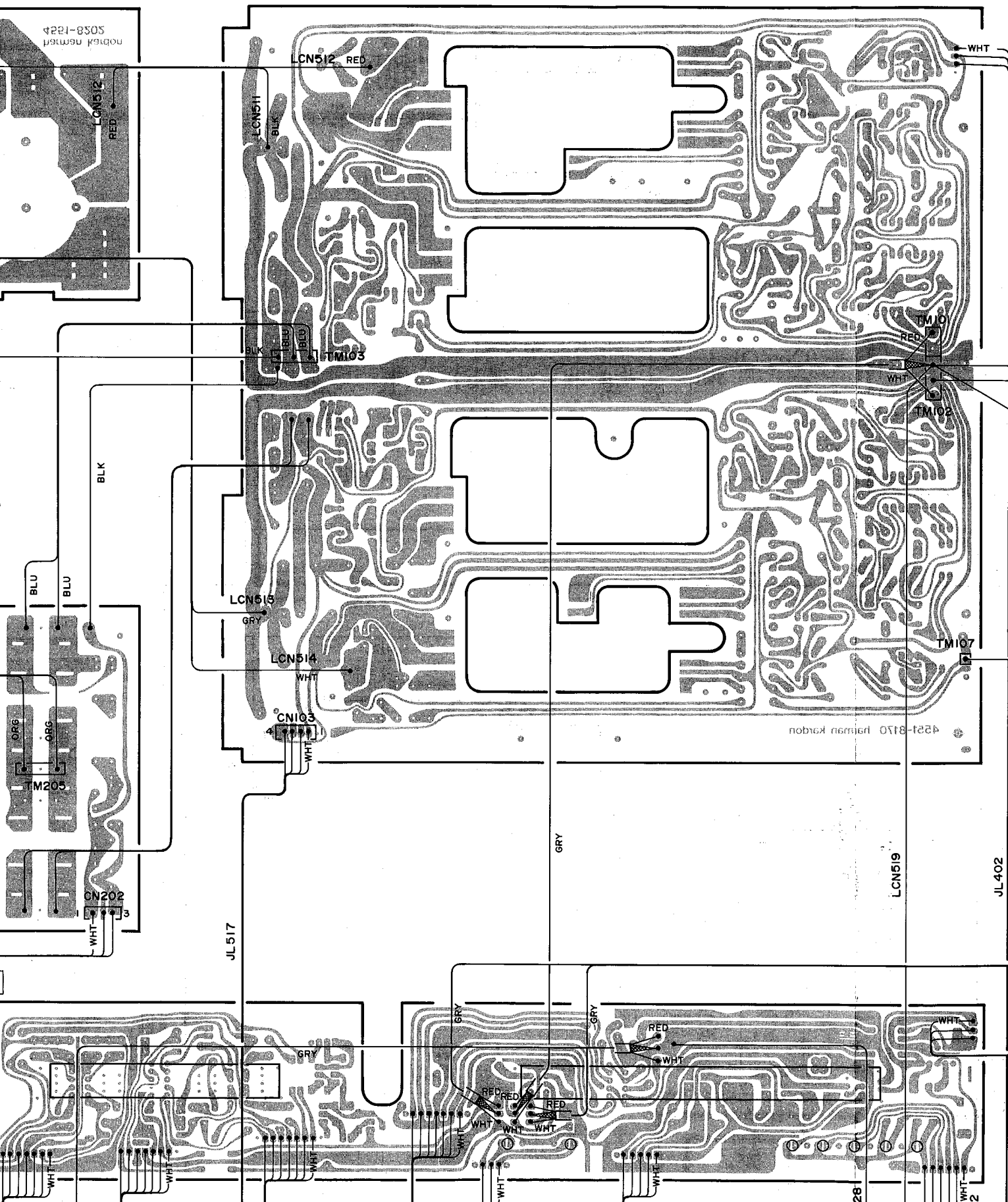
Red	: RED	YEL	: Yellow
ORG	: Orange	PUP	: Purple
BLU	: Blue	PIK	: Pink
WHT	: White	GRY	: Gray
GRN	: Green	BRN	: Brown
BLK	: Black		

WIRING DIAGRAM



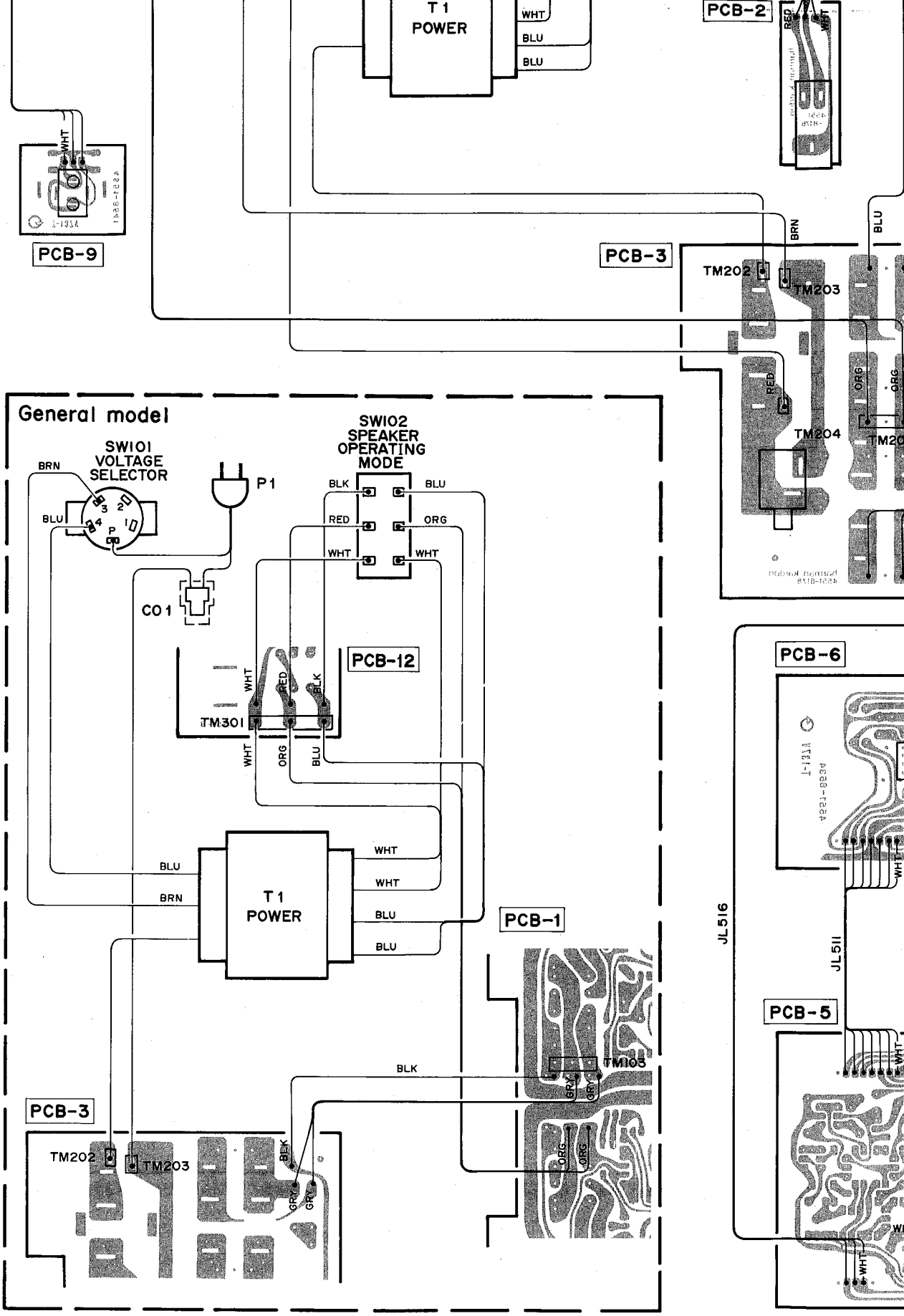
F G H I J

PCB-1


LCN512
RED
LCN511
BLK
WHT
TM103
BLU
BLK
TM10
RED
WHT
TM102
BLK
BLU
BLU
LCN513
GRY
LCN514
WHT
TM107
CN103
4
WHT
ORG
ORG
TM205
CN202
1
3
WHT
JL517
GRY
LCN519
JL402
GRY
GRY
RED
WHT
RED
RED
RED
WHT
WHT
WHT

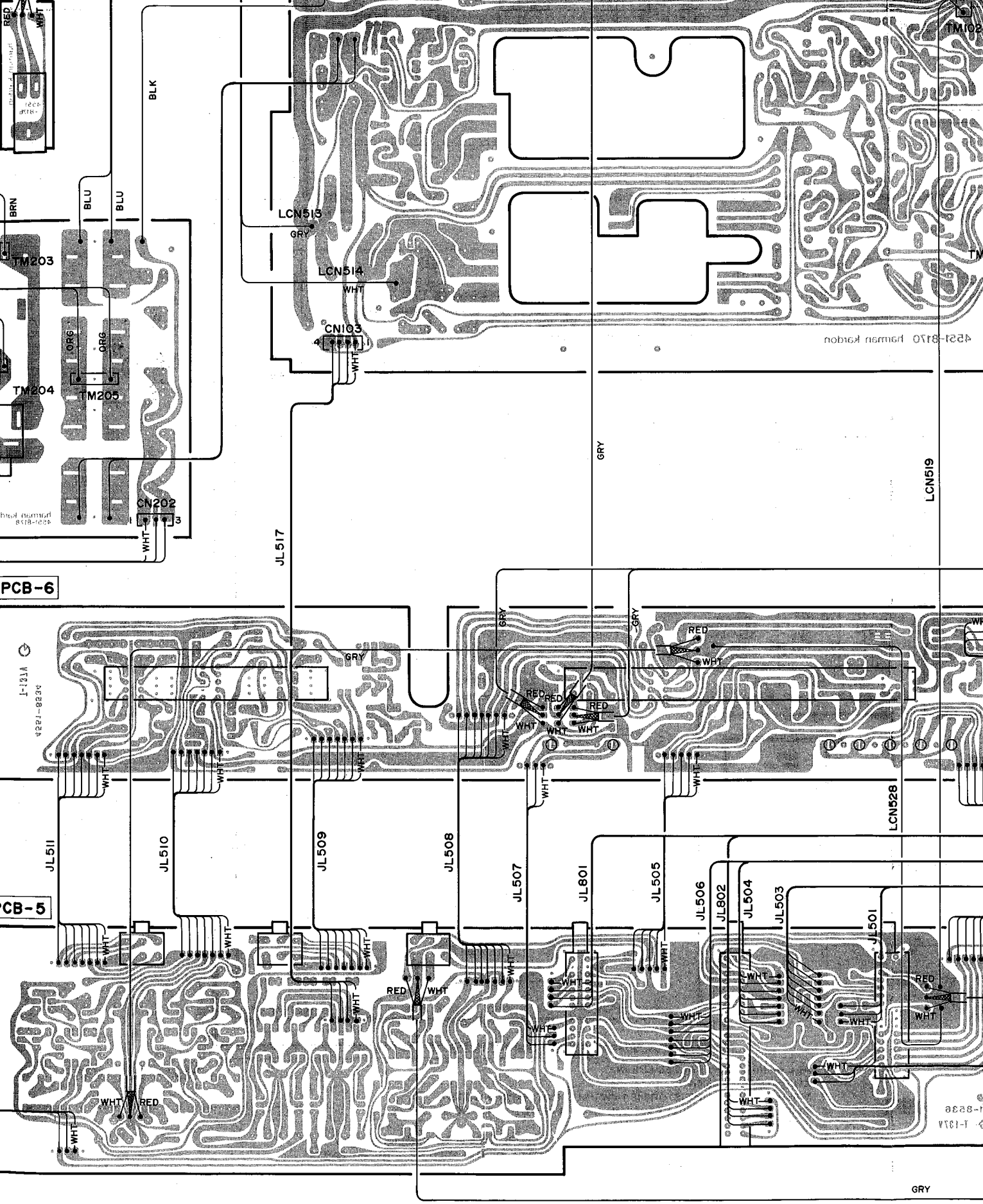
J K L M N

PCB-10
PCB-11
WHT
RED
GRY
TM101
TM102
TM107
LCN801
LCN529
LCN519
JL402
LCN517
JL801
JL802
JL504
JL506
JL515
JL514
JL501
CN515
CN501
CN507
4551-8170 Harman Kardon



WIRE COLOR ABBREVIATIONS

Red	: RED	YEL	: Yellow
ORG	: Orange	PUP	: Purple
BLU	: Blue	PIK	: Pink
WHT	: White	GRY	: Gray
GRN	: Green	BRN	: Brown
BLK	: Black		


RED
WHT
BRN
BLU
BLU
BLK
TM203
TM204
TM205
ORG
ORG
LCN513
GRY
LCN514
WHT
CN103
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WHT
CN202
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WHT
JL517
GRY
LCN519
TM102
PCB-6
PCB-5
GRY
GRY
RED
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RED
RED
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LCN528
JL511
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TM102
TM107
RED
PCB-11
LCN519
JL402
LCN517
CN515
RED
WHT
WHT
JL514
LCN528
JL502
WHT
GRY
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JL503
JL501
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RED
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JL515
PCB-7
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WHT
RED
PCB-8
WHT
RED
GRY